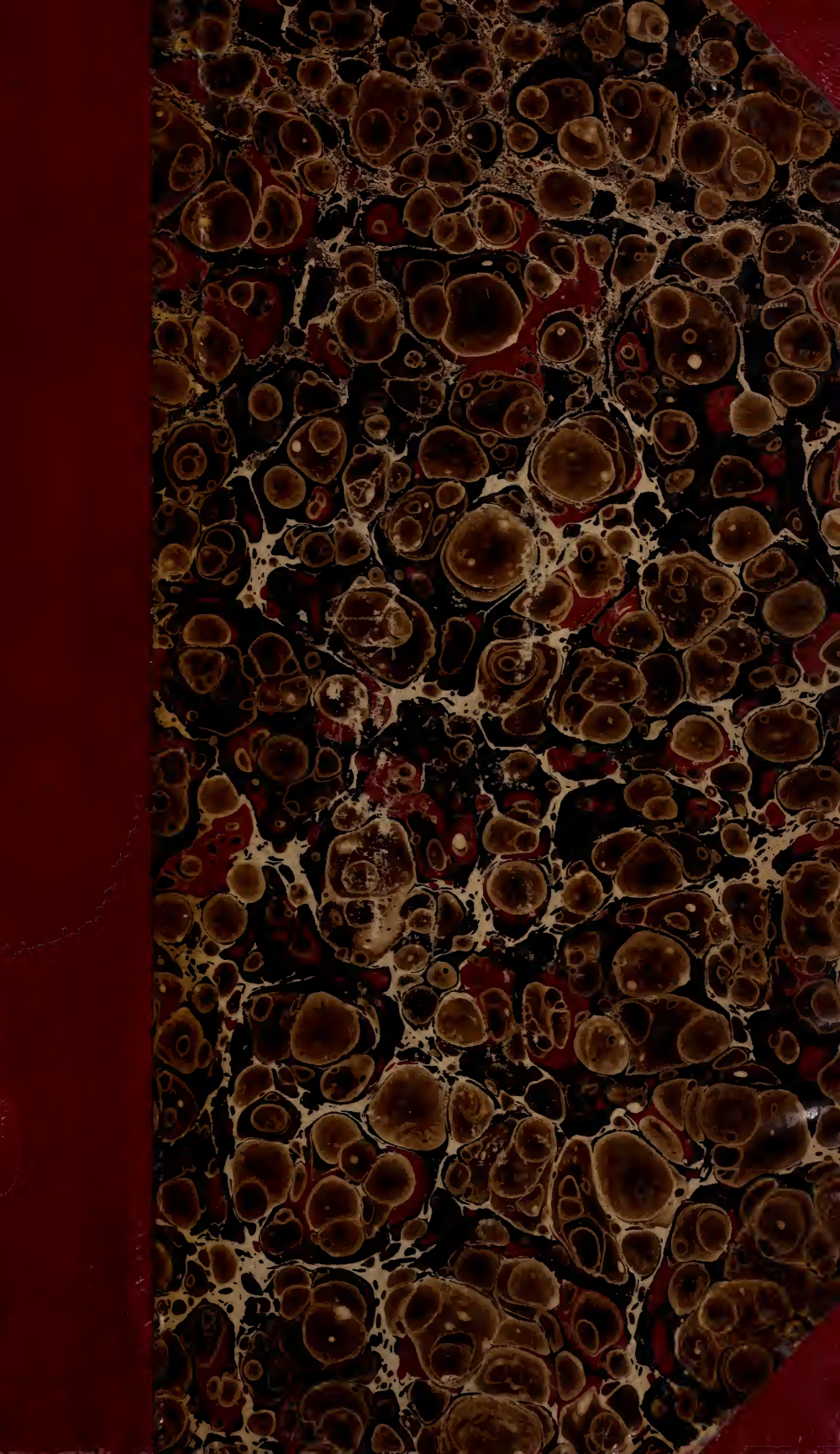

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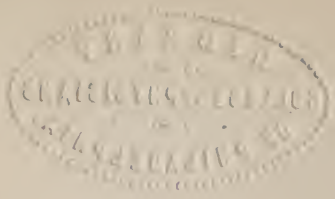

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THE

CHICAGO MEDICAL

JOURNAL & EXAMINER.

VOL. XLVIII.—JANUARY, 1884.—No. 1.

Original Communications.

ARTICLE I.

PRACTICE AT THE COUNTY INFIRMARY. By A. W. HAGENBACH M.D., Medical Superintendent.

In the March, 1882, number of the JOURNAL AND EXAMINER, was published my first article on "Practice at the County Infirmary," with tables showing the total number of male patients treated in the Hospital Department during the previous year, giving a detailed account of several cases of special interest. During the year 1882, a large number of interesting cases have been admitted, and as this is the second report ever made showing the medical status of the institution, I have prepared a number of tables, embracing Diagnoses; Ages; Cause of Death, etc., of every male patient treated during the year. A great deal of just criticism has been indulged in by the daily press and visiting public concerning the dilapidated condition of the old infirmary

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buildings. This cause for complaint is happily removed, as we now occupy the new structure, conceded to be one of the best buildings of its kind in the United States. The new buildings will accommodate 800 inmates, including hospital accommodations for 150 patients. The lying-in ward is pleasantly situated, well lighted and heated, and contains 20 beds. The steam heating and ventilating apparatus are of the most approved pattern. The buildings are heated throughout by direct radiation, circulating coils being employed in the large dormitories, twelve in number, and radiators in the general kitchen, dining-rooms, corridors, administration and hospital buildings. The accompanying diagrams (see pp. 4-5) will show the plan of two stories of the new buildings.

DESCRIPTION OF COOK COUNTY INFIRMARY.

The plan of the building is a departure from similar buildings heretofore erected, and is original with Mr. J. C. Cochrane, the architect, and, as experience teaches, is admirably adapted to charity buildings, affording as it does light and ventilation, and a great amount of sunshine ; the plan also commends itself as convenient regarding the domestic and culinary department, the different wings radiating from two common centers, places the inner ends near to the kitchen, laundry and dining-room, thereby saving distance for transportation of food, the greatest distance from the dining-room to the kitchen being 26 feet.

The basement story contains workshops, boiler and engine-room, laundry, office, reception room, etc.

The principal story contains the parlors, dining-rooms, warden's office, doctor's room, dispensary, kitchen, dormitories, sewing and reading-room.

The second story contains warden's private room, hospitals and dormitories ; the third story, the same.

The exterior is quite picturesque; the different wings radiating, and the sharp roofs giving a grand effect to the group. The walls are of solid brickwork, and there are verandahs, two and three stories high, affording accommodation for rustication and exercise.

One of the most desirable features of the plan is that the sun

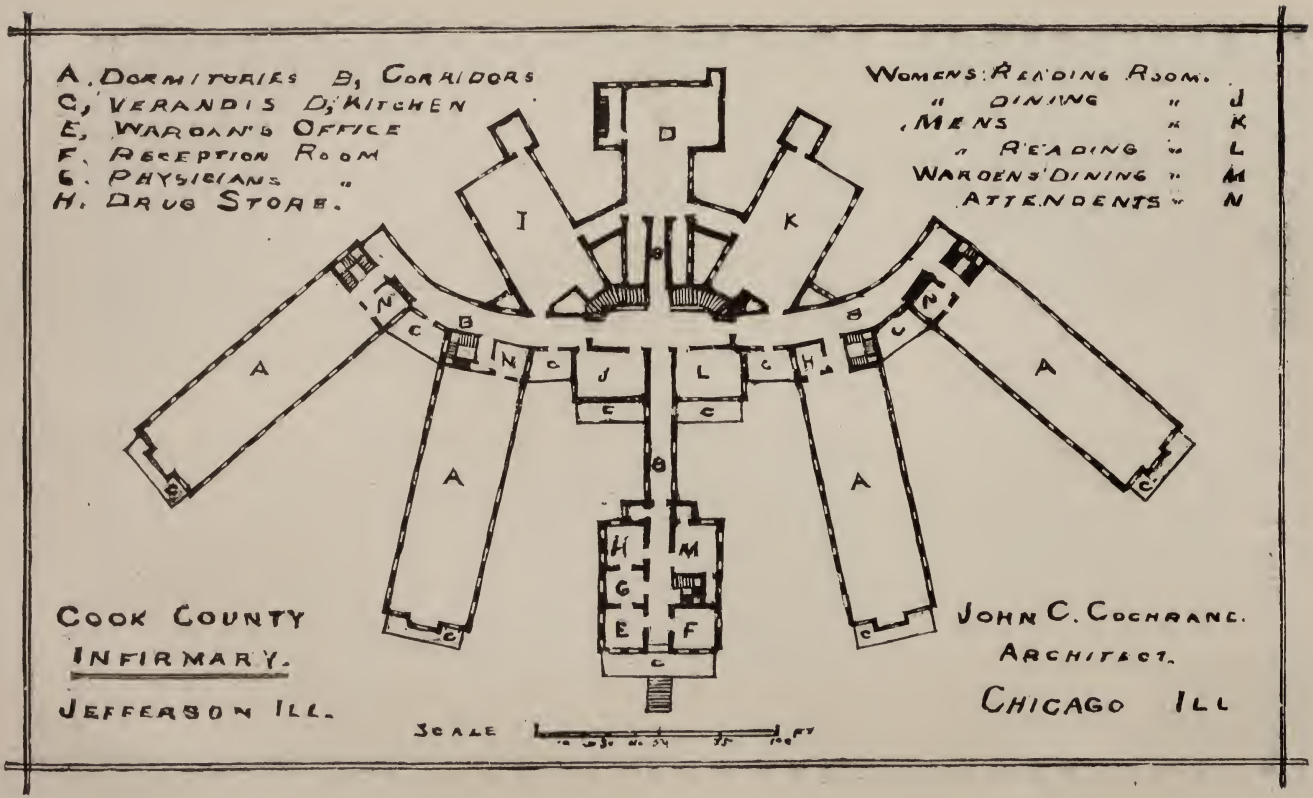
will shine in every room in the building twice each day, morning and evening.

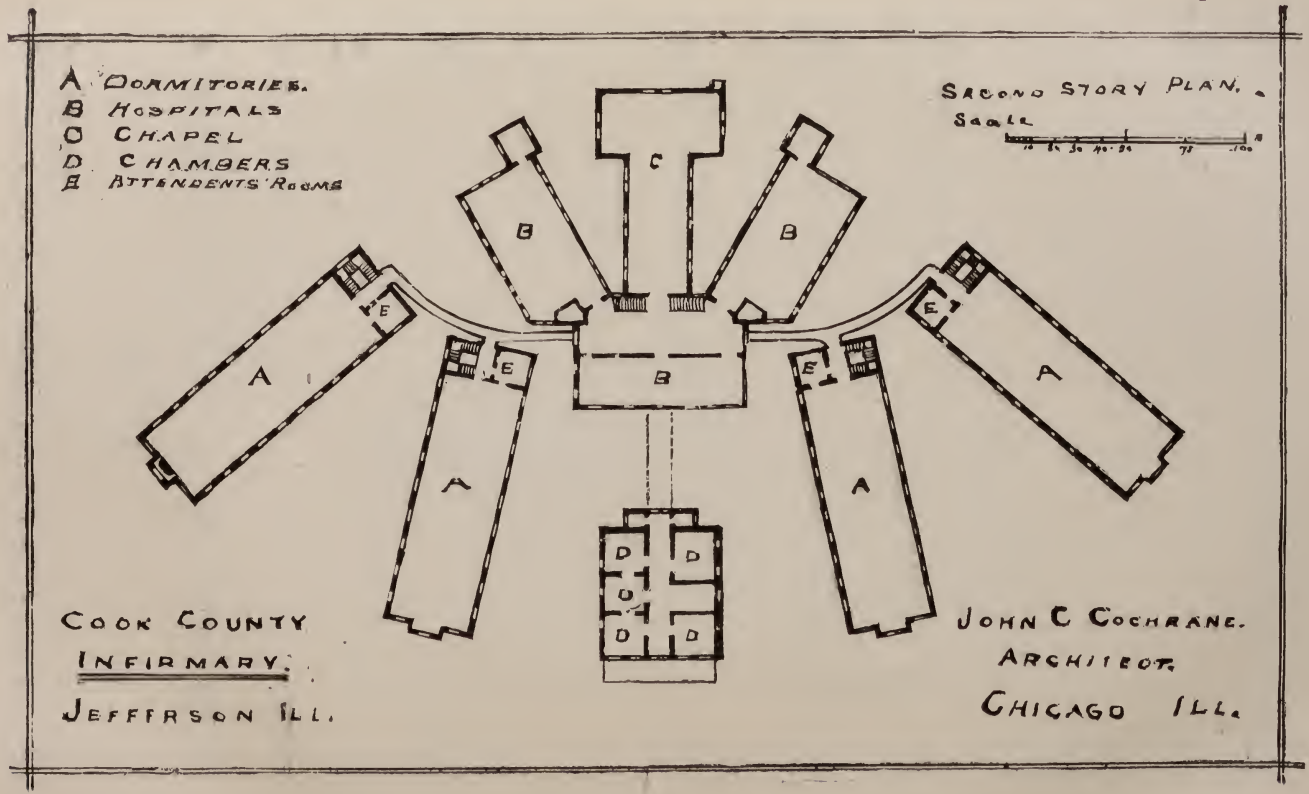
Another cause for congratulation is the recognition by the county authorities of primary syphilis as a disease entitled to hospital treatment. In my last article, I called attention to the want of provisions for this unfortunate class of patients, as follows:

"The rules governing the admission of patients to the charitable institutions supported by this county, prohibit the admission of patients suffering with primary syphilis. The city of Chicago has made no provisions whatever for this unfortunate class of patients; cases are not infrequently admitted with secondary, or even tertiary symptoms, who have received no previous treatment." *

This unjust discrimination against syphilis has at last been abandoned; and while I am opposed to the indiscriminate mixing of these patients with the patients of a general hospital ward charity demands that they be admitted to the hospitals, and a ward set aside for their treatment until the authorities awake to the necessity of making suitable separate provisions for their case. The insane, feeble-minded, deaf, blind, and sick are cared for in costly buildings, at the State's, or local government's expense, and I can see no just reason why the syphilitic alone should be excluded from the benefit of the lavish charity bestowed upon all others in distress. I have known of several instances where indigent persons suffering with tertiary syphilis were refused admission to the various charitable institutions of Chicago until the police authorities insisted upon their removal from the public streets on account of the loathsome appearance they presented. The argument I once heard advanced by a person in authority, that syphilis should be regarded as a crime more than a misfortune, would apply with equal force to masturbative insanity, alcoholism, and various other affections that are treated in insane asylums and hospitals. I cannot conceive of a case calling for more sympathy, or entitled to better care at the public expense, than the virtuous wife of a besotted husband who has become

* A case of neglected syphilis was reported by me in the March, 1882, number of the JOURNAL AND EXAMINER.


A. DORMITORIES B. CORRIDORS
C. VERANDIS D. KITCHEN
E. WARDAN'S OFFICE
F. RECEPTION ROOM
G. PHYSICIANS "
H. DRUG STORE.
WOMENS READING ROOM. I
" DINING " J
MENS " K
" READING " L
WARDENS DINING " M
ATTENDENTS " N
COOK COUNTY
INFIRMARY.
JEFFERSON ILL.
JOHN C. COCHRANE.
ARCHITECT.
CHICAGO ILL
SCALE


A DORMITORIES.
B HOSPITALS
C CHAPEL
D CHAMBERS
E ATTENDENTS ROOMS
SECOND STORY PLAN.
Scale
A
B
C
D
E
COOK COUNTY
INFIRMARY.
JEFFERSON ILL.
JOHN C COCHRANE.
ARCHITECT.
CHICAGO ILL.

impregnated with the syphilitic poison, and then deserted in indigent circumstances.

TABLE I.

Medical Cases Treated in the Male Hospital of Cook County Infirmary dur- the year 1882.

GENERAL.

Alcoholism	.....	4		
"	Inanition	2		
"	Paraplegia	1		
"	Ulcers of leg	1		
			8	
Anasarca, general	Old age		2	
Anæmia	Anasarca	1		
"	General debility	1		
"	Old age	2		
			4	
Debility, general	.....	2		
" "	Anæmia	1		
" "	Convalescing from variola	1		
" "	Dementia	2		
" "	Inanition	3		
" "	Old age	11		
" " traumatic	.....	1		
" " " following	Nerve stretching	1		
			22	
Febricular	.....		1	
Fever, intermittent	.....	4		
" "	Constipation	1		
" "	Phthisis pulmonalis	1		
		6		
" typhoid	.....	3		
" typho-malarial	.....	1		
			10	
Imbecile	.....		1	
Inanition	Convalescence from variola		1	
Old Age	.....	2		
"	Anæmia	1		
"	General debility	1		
			4	
Opium habit	Alcoholism	1		
" "	Ulcer on vertex of head	1		
			2	
Rheumatism, chronic	.....	13		
" "	Anæmia	1		
" "	Joints deformed	2		
" "	Old age	1		
" "	Valvular insufficiency of heart	2		
		19		
" " articular	.....	1		
" " "	Varicose ulcers	1		
		2		
" " inflammatory	.....	3		
" " "	Paraplegia	1		
		4		
" acute	.....	3		
			28	
Vaccinia, inflamed	.....		1	
Variola	.....		1	
				85

GASTRO-INTESTINAL.

Diarrhœa, acute				
" "		Secondary syphilis	1	
				2
" chronic			19	
" "		Anæmia	2	
" "		Bronchitis	1	
" "		Caries of elbow	1	
" "		General debility	5	
" "		Dementia	4	
" "		Febricula	1	
" "		Hemiplegia, right	1	
" "		Hemorrhoids	1	
" "		Hernia, double inguinal	1	
" "		Inanition	1	
" "		Old age	2	
" "		Chronic rheumatism	1	
				40
				42
Dysentery, acute				2
" chronic				2
				4
Enteralgia				1
Enteritis				1
" chronic				1
				2
Gastritis, sub-acute		Diarrhœa		1
Gastro-enteritis				1
" "		Bronchitis		1
" "		Diarrhœa		3
" "		Icterus		2
				7
Morbus plumbeus				1
				58

TABLE II.

Surgical Cases Treated in the Male Hospital of Cook County Infirmary, During the year 1882.

AFFECTIONS OF BONES AND APPENDAGES.

Ankle enlargement, chronic		Anæmia		1
Bone hypertrophy				1
Caries, tarsus			1	
". elbow joint			2	
				3
Dislocation, wrist				1
Fracture, acromion process			1	
" femur			1	
" radius			1	
" ribs			1	
" tibia and fibula			2	
				6
Injury to provisional callus				1
Knee joint enlarged, traumatic				1
Leg deformed, traumatic				1
Sprain, ankle				1
Spinal injury				2
Toe, deformed			1	
" crushed			1	2
				20

AFFECTIONS OF THE EYE.

Amaurosis		Anæmia	1	
"		General debility	2	
				3
Cataract senile		General debility		2
Conjunctivitis		Ulcer of leg	1	
" chronic		Bronchitis	1	
				2

Hypopyon			1	
"	Imbecile		1	
				2
Lens crystalline, displaced				1
Ophthalmia, gonorrhœal				1
				11

AFFECTIONS OF INTEGUMENT.

Combustivo derma				2
Eczema			1	
" chronic	Indolent ulcer of leg		1	
				2
Erysipelas, face			1	
" " and head			1	
				2
Herpes, diffus. syphilitic				1
Scabies				2
				9

SPECIFIC.

Cancer, pylorus				1
Scirrhus, tongue			1	
" face			1	
				2
Syphilis, hereditary			1	
" "	Ulcers face and neck		1	
				2
" primary	Chancroidal ulcers		1	
" "	Gonorrhœal		1	
" "	Suppurating bubo		1	
				3
" secondary			1	
" "	Anæmia		1	
" "	Suppurating bubo		1	
" "	Ulcers, pharynx		1	
				4
" tertiary			1	
" "	Destruction soft palate		1	
				2
				14

GENERAL.

Abscess, leg	Erysipelas		2	
" nates			1	
				3
Apoplexy, cerebral			1	
" "	Partial hemiplegia		1	
" "	Right "		1	
				3
Anthrax, leg				1
Amputation, arm			1	
" leg			1	
				2
Bruises				1
Cystitis			1	
"	Chronic rheumatism		1	
				2
Cerebral concussion				1
Ecchymosis, traumatic	Dementia			1
Epistaxis				1
Fistula, urethra				2
Frost bite, feet			1	
" "	Dementia		1	
" "	Melancholia		1	
" fingers and toes			1	
				4
Hernia, double inguinal			1	
" strangulated, oblique inguinal			1	
				2
Lymphadenitis, suppurating				1
Neurotrosis				1
Orchitis, acute				1

Paralysis, traumatic			1	
Paraplegia, "			1	
Prolapsus rectum			1	
Strain quadratus lumborum			1	
Stricture, urethra			2	
Synovitis, right knee		2		
" left "		3		
			5	
Ulcers, chancroidal		2		
" "		1		
			3	
" cornea			1	
" in cicatrix			1	
" gastric			1	
" heel traumatic			1	
" inflamed leg			1	
" indolent leg		2		
" " "		1		
			3	
" over malleolus			1	
" phagedenic			1	
" inf. ext. syphilitic			1	
" tonsils		1		
" varicose		3		
" "		1		
			4	
" syphilitic			1	
				20
Vesicles, foot, traumatic			1	
Wound, elbow			1	
" foot, penetrating			1	
" gunshot			1	
" incised			1	
" knee, penetrating			1	
" lacerated			2	
" scalp			1	
			8	66
Total				120

HEART.

Angina pectoris			1	
Endo-carditis			1	
Valvular lesions of heart		2		
" "		2		
" "		2	6	
				8

KIDNEYS.

Albuminuria			5	
"			2	
"			1	
"			2	
"			1	
				11

LUNGS, ETC.

Asthma with bronchitis		9		
" "		1		
			10	
Bronchitis		7		
"		6		
"		5		
"		1		
"		1		
"		1		
"		1		
"		4		
"		1		
			27	
Emphysema pulmonum			1	
Laryngitis			1	

Phthisis pulmonalis			17		
" "			Anæmia	1	
" "			Aphonia	1	
" "			Bronchitis	4	
" "			Convalescing from variola	1	
" "			Chest contracted	1	
" "			Hemorrhoids	1	
" "			Icterus	1	
" "			Inanition	1	
" "			Pneumonia, circumscribed	1	
" "			Icterus	1	
" "			Tubercular laryngitis	2	
" "			Valvular lesions of heart	2	
					34
Pleuritis circumscribed				2	
" left side			Ptosis right eye-lid	1	
					2
Pleuro-pneumonitis				1	
" "			Valvular insufficiency	1	
					2
Pneumonitis				1	
" circumscribed				2	
"			Alcoholism	1	
"			Bronchitis	1	5
					83

NERVOUS SYSTEM.

Aphasia			Hemiplegia, partial		1
Cardiagra					1
Chorea				2	
" chronic			Anasarca, general	1	
					3
Dementia				1	
"			Hemplegia	1	
"			Old age	4	
					6
Epilepsy			Anæmia	2	
"			Bronchitis	1	
"			Hemiplegia	1	
"			Paraplegia, partial	1	
					5
Hemiplegia, right				2	
" "			Complete aphasia	1	
					3
" left				2	
" "			Cephalalgia, frontal	1	
" "			Dementia	1	
" "			Fracture, neck of left femur	1	5
					8
Hyperæmia, spinal cord			Partial paralysis		1
Mania, chronic					1
" "			Paralysis of extremities		1
" recurrent					1
" sub-acute			Nasal catarrh		1
					4
Melancholia			Hysteria	1	
"			Chronic rheumatism	1	
" sub-acute				1	
" suicidal				1	
					4
Neuralgia, facial				1	
" intercostal				1	
					2
Neurasthenia					1
Paralysis, agitans			Hernia, inguinal	1	
" extremities, complete			Dementia	1	
" partial			Mania, chronic	1	
" rectum and bladder				1	
					4
Paraplegia			Paralysis, rectum and bladder		2
Pleurodynia					1
Spinal sclerosis			Hemiplegia, right		1
Tabes dorsalis				2	
" "			General debility	2	
" "			Orchitis, right testicle	1	
" "			Ulcers, floor of mouth	1	6 50
			Total		295

TABLE III.

Nativity of Male Patients Treated in Hospital During the Year 1882.

United States, white	74	Holland	2
" " colored	9	Hungary	1
	83	Ireland	120
Belgium	1	Norway	18
Bohemia	8	Poland	3
Canada	3	Russia	1
Denmark	7	Scotland	16
East Indies	1	Sweden	24
England	15	Switzerland	1
France	2		
Germany	108	Total	415

TABLE IV.

Age of Male Patients Treated in Hospital During the Year 1882.

Under 20	9	From 60 to 65	36
From 20 to 25	19	" 65 " 70	49
" 25 " 30	23	" 70 " 75	33
" 30 " 35	21	" 75 " 80	19
" 35 " 40	34	" 80 " 85	25
" 40 " 45	25	" 85 " 90	5
" 45 " 50	36	" 90 " 95	1
" 50 " 55	38		
" 55 " 60	42	Total	415

TABLE VI.

Nativity of Patients who have Died in the Male Hospital of Cook County Infirmary During the Year 1882.

United States, white	17	Holland	1
" " colored	3	Ireland	31
	20	Norway	4
Belgium	1	Scotland	1
Bohemia	2	Sweden	9
Canada	1		
England	2	Total	110
Germany	38		

TABLE VII.

Age of Patients who have Died in the Male Hospital of Cook County Infirmary During the Year 1882.

From 20 to 25	3	From 60 to 65	13
" 25 " 30	5	" 65 " 70	10
" 30 " 35	3	" 70 " 75	13
" 35 " 40	5	" 75 " 80	11
" 40 " 45	8	" 80 " 85	9
" 45 " 50	6	" 85 " 90	2
" 50 " 55	10		
" 55 " 60	12	Total	110

TABLE V.

Cause of Death of Patients in Male Hospital of Cook County Infirmary during the year 1882.

Immediate Cause.	*Complications.*		
Albuminuria		1	
"	Anasarca	2	
"	Coma	1	
"	Phthisis	1	
			5
Anasarca	Old age	1	
"	Valvular insufficiency of heart	1	
			2
Anæmia	Old age		4
Apoplexy, cerebral	Anæmia	1	
" "	Asthma	1	
" "	Diarrhœa	1	
" "	Hemiplegia	1	
" "	Imbecile	1	
" "	Old age	1	
" "	Paralysis rectum and bladder	1	
" "	Phthisis	1	
" "	Valvular insufficiency of heart	1	
			9
Asthma and bronchitis			3
Bronchitis	Diarrhœa	2	
"	Inanition	1	
"	Old age	2	
			5
Chorea	Debility		1
Cystitis	Rheumatism		2
Debility, general		1	
" "	Bronchitis	1	
" "	Inanition	1	
" "	Old age	5	
" "	Tertiary syphilis	1	
			9
Dementia	Old age	1	
"	Paralysis	2	
"	" rectum	1	
			4
Diarrhœa		4	
"	Bronchitis	1	
"	Caries of elbow	1	
"	Dementia	2	
"	Gastro-enteritis	1	
"	Old age	3	
"	Ulcers	1	
			13
Dysentery			5
Enteritis			1
Erysipelas	Embolism		1
Fever, remittent	Anæmia	1	
" typhoid	Pulmonary congestion	1	
			2
Gastro enteritis	Icterus	1	
" "	Inanition	1	
" "	Old age	1	
			3
Heart, valvular lesions	Anasarca	2	
" " "	Enlargement of heart by dilatation	1	
			3
Hemiplegia	Cerebral apoplexy		1
Inanition			1
Marasmus senile	Debility		1
Melancholia	Hysteria		1
Opium habit	Peritonæal dropsy		1
Paralysis, partial	Debility		1
Phthisis pulmonalis		10	
" "	Anasarca	1	
" "	Anæmia	1	
" "	Diarrhœa	1	
" "	Valvular lesions of heart	1	
" "	Laryngitis	1	
" "	Pneumonia, circumscribed	2	
" "	Pulmonary hæmorrhage	1	
			18

Pleuritis, double		Pneumonia, lobular	1
Rheumatism		Anæmia	1
"		Old age	1
"		Ulcers	2
			4
Rigor congestiv		Icterus	1
Scirrhus stomach			1
" "		Hæmatemesis	1
" tongue			1
			3
Stasis epilepticus		Hemiplegia	1
Synovitis		Cirrhosis of liver	1
Tabes dorsalis		Abscess, floor of mouth	1
" "		Debility	1
" "		Old age	1
			3
		Total	110

The tables show that 295 medical, and 120 surgical cases were admitted to male hospital department during the year. The 8 cases of alcoholism were mostly former inmates who were refused admission to the County Hospital, Chicago, being regarded as infirmary patients. The 26 cases of anæmia, and general debility, were mostly old persons, or convalescents from variola, surgical operations, etc., the anæmia or debility being the principal feature in the cases requiring treatment. Of the 7 cases of malarial fevers, but one originated on the premises. The infirmary buildings are located on a dry, sandy ridge, and the inmates are remarkably free from malaria. Two of the three typhoid fever patients were recent European immigrants. The imbecile was admitted for a short time to hospital department during the extreme cold weather, as he had a tendency to stray away. The 4 cases entered as "old age" were sent to hospital department, on account of their very helpless condition.

The twenty-five cases of chronic rheumatism include articular, muscular, and syphilitic varieties.

Diseases of the gastro-intestinal tract form a sixth of all the medical cases. Diarrhœa is a very common ailment.

A large percentage of the inmates, previous to their admission go for weeks without a warm meal or proper food of any kind, spending what little money they earn, or can beg, on alcoholic stimulants, living on free lunches composed frequently of stale bread and decomposing meats, causing intestinal irritation, and, not infrequently, gastro enteritis. The cases that originate among the inmates can usually be traced to an insufficient change of diet. A simple cathartic, followed by special diet for a few days, is the best treatment, and generally results in a

speedy cure. The six cases entered as "valvular lesions" were patients in whom the insufficiency was so great as to prevent them from living in the general wards.

Next to diarrhœa and phthisis, bronchitis has been the most prevalent disease. The physical signs of some of the very chronic cases, usually encountered in infirmaries, are so marked that the râles can be heard at a distance of several feet from the patient. The treatment from which I have derived the best results in these distressing cases has been the administration of potassium iodide in from five to eight grain doses, with Brown's Mixture or some similar cough preparation, and the application of croton oil to the chest. The latter, if persisted in, will do more towards affording relief than anything I have ever made use of. The usual way of applying the croton oil in these cases is as follows: First, a thorough application to anterior chest walls, making a second or even a third application if vesicles do not appear at the end of twelve hours. When the vesicles begin to dry up and disappear, a coat is applied over posterior chest, and later over lateral chest walls. The entire process is repeated at intervals of a few days until relief is experienced, provided always that the general health of the patient warrants a continuation of the treatment. No other treatment has been followed by as good results, and I am firmly convinced that counter-irritation is one of the most important factors in the successful treatment of chronic bronchitis.

Of the 34 cases of phthisis pulmonalis admitted, a majority were transferred from various city hospitals in an advanced stage of the disease, and presented no unusual features. The expectoration of blood is usually the most alarming symptom, in the estimation of the patients; a number living in constant dread of a fatal hæmorrhage, and frequently feel greatly relieved when assured that but a small percentage of cases terminate in that manner. The great infrequency of deaths occurring during a pulmonary hæmorrhage, is illustrated by the fact that of the hundreds of consumptives that came under my immediate care in this institution during the past seven years, not more than five or six cases have terminated in that manner. Such deaths are painful to witness, the patient being conscious of his condition

within a few moments of his death. Two cases of pleurisy, 2 of pleuro-pneumonia, and 5 of pneumonia were admitted. Two of the cases of pneumonia were circumscribed, and limited to the upper lobe of one lung. Under the heading "Nervous System" are included one-sixth of the total number of medical cases treated. The large number of insane cases is explained by the fact that harmless chronic insane patients are sometimes transferred from the Insane Asylum to the Infirmary, where acute symptoms may at any time develop, necessitating their removal to the hospital department for a short period, when, if they do not improve, they are returned to the asylum.

The six cases of tabes dorsalis were sent to hospital, because they were unable to live with comfort in the general wards.

The surgical tables show that 120 cases were treated during the year—20 cases of affections of the bones and appendages, 11 of the eye, 9 of the skin, 14 specific, and 66 unclassified.

Of the affections of the bones, the case of traumatic deformity of the leg is reported further on. The fractures include a fracture of the acromion process—femur, radius, ribs, tibia, and fibula. Nearly all the above were indigent persons, meeting with accidents in neighboring towns. The only eye affection calling for special notice is the case of hypopyon, and a case of gonorrhœal ophthalmia; the former because a prolapsus of the iris took place through an incision for the removal of the pus; the latter on account of the acute character of the attack, both eyes being totally destroyed a short time previous to his admission.

Of the affections of the skin, the case of diffuse herpes is of interest, from the fact that the eruption extended over the entire body, reappearing several times at intervals of a few weeks. The patient had had syphilis, and specific treatment was followed by immediate improvement.

Several cases of scabies are admitted nearly every year. The treatment generally followed is as follows: First, destruction of all wearing apparel; second, general bath; third, daily carbolic acid baths, and application of carbolic acid or sulphur ointments. The 14 cases of syphilis recorded do not include one-half of the cases treated, but only such patients as could not be treated as dispensary cases.

The two operations recorded in tables were performed away from the institution, and sent here for subsequent treatment. The amputations here include an amputation of the leg, on account of cancer of the foot; a re-amputation of leg—railroad accident; amputation of five fingers—frost bite; amputation of left arm, upper third, for deformity; and an amputation of foot following frost bite. As usual, ulcers form the largest percentage of surgical cases, including chancroidal, corneal, gastric, inflamed, indolent, phagedenic, syphilitic, and varicose varieties. The wounds include penetrating, gunshot, incised, lacerated, and contused wounds.

Table V., showing "cause of death," shows that disease of the lungs caused the greatest number of deaths, comprising nearly a fourth of the total number. Eighteen deaths were due to phthisis pulmonalis, 8 to bronchitis or asthma, and 1 to double pleurisy. Twenty-one deaths were due to diseases of the nervous system, as follows: Cerebral apoplexy 9; dementia 4; tabes dorsalis 3; hemiplegia, stasus epilepticus, paralysis, melancholia, and chorea, each one. Seventeen deaths were due to gastro-intestinal troubles. Diarrhoea 13; gastro-enteritis 3; enteritis 1. Diseases of the heart caused three deaths, and specific (all cancers) three more. It will be noticed that not a single death is ascribed directly to syphilis. Thanks to the more correct theories and treatment, syphilis is no longer frequently fatal *per se*. There can be no question, however, that through it the general health is frequently impaired to such an extent as to render the system more susceptible to certain acute attacks of disease, and less able to overcome them. Syphilitic patients succumb to affections that would have made but a slight impression had they been in a normal condition. Syphilis is one of the most encouraging diseases to treat, so far as improvement is concerned, but, unfortunately, we can hope for but little more. Constant treatment is the price of comparative good health. Old men are frequently admitted suffering from syphilitic rheumatism, or some other syphilitic affection, who, when asked if they ever had syphilis, will reply, "Yes; but that was many years ago," and volunteering the information that they were treated in time, and entirely cured, etc., never imagining for a moment that their present ailment is in any

way related to their youthful indiscretions. From my experience in the treatment of neglected syphilis, I am very hopeful of improvement, even in the most aggravated cases. A case illustrating this point will be briefly reported.

CASE.—A. W. contracted syphilis about twelve years ago; she led a very dissipated life, and neglected treatment except during a few short periods ever since. When admitted about a year ago, the soft palate was almost completely destroyed; syphilitic nodes had formed on various parts of the body, especially the extremities. The turbinated bones had been discharged through the nostrils and mouth, and several small pieces of dead bone had also separated from skull. When admitted, a bluish swelling about the size of a hen's egg and hard to the touch, was noticed in central frontal region, about an inch above nasal eminence. The surface of the swelling commenced to ulcerate, when dead bone was detected by means of a probe. Under specific and tonic treatment her health improved rapidly. The only symptom experienced by the patient was periodical headaches, and later slight continuous frontal headache, regarded as due to a low grade of meningeal inflammation. It was decided to continue the treatment until the bone had completely separated, as it was feared that the necrosis involved the entire thickness of skull, and that adhesions had taken place between its inner surface and dura mater. She insisted upon an operation, however, trying to loosen and remove the bone herself. An operation being decided upon, she was anæsthetized, and the bone carefully loosened from dura mater, to which it was firmly adherent near its lower end. A pair of forceps and handle of scalpel were employed to break up the adhesions. The piece of dead bone removed involved entire thickness of skull, and measured $1\frac{5}{8}$ by $\frac{7}{8}$ inches. The dura mater was thickened and very vascular. After the bleeding had ceased it could be seen at the bottom of the wound, rising and falling with each pulsation of the brain. No unpleasant symptoms followed until the fourth day after the operation, when she suddenly became restless and had an attack of acute mania, with rapid, bounding pulse, flushed face, and considerable febrile disturbance. She became so violent that she had to be removed from the hospital ward and confined in a cell reserved for in-

sane patients. Potassium bromide, chloral hydrate and fluid extract of ergot were administered with great benefit; all the acute symptoms disappearing at the end of twelve hours. Less acute attacks were experienced at intervals of from five to twenty-four hours, and as the facilities were insufficient for a protracted treatment she was declared insane, and transferred to the Hospital for the Insane, June 7, 1883. June 18, I saw the patient engaged in general house work at the asylum. She spoke quite rationally and expressed herself as feeling relieved. The wound on her forehead had almost closed by granulation. She remained in about the same condition until July 19, when she was re-transferred to the infirmary, where she left of her own accord July 24, with the wound healed, and mentally sound.

SILENT PLEURISY.

An interesting case of silent pleurisy, entered in tables as "Hydrothorax," was admitted March 17, 1883, with the following history:

Æt. 51 years; has always been temperate. The first symptom noticed by himself was pain in lower portion of chest, accompanied by slight cough, in July, 1882. Never had a chill, but coughed considerably throughout. He employed various physicians without deriving any apparent benefit; was admitted to Cook County Hospital, Chicago, but left of his own accord unimproved at the end of three weeks; was re-admitted to hospital Jan. 3, 1883, and discharged unimproved. A few days previous to his admission here, March 17, I telephoned to the hospital concerning his case, and was informed that the diagnosis in "hospital register" was "Bright's Disease." When first admitted here he suffered greatly from difficulty in breathing; could not possibly retain the recumbent position. He informed me that he had been in about the the same condition for several months previous to his admission. His lips were of a bluish color, showing improper oxidation; pulse feeble and rapid, with constant cough and but slight expectoration. Upon physical examination his right chest was found by measurement to be one and a half ($\frac{1}{2}$) inches larger than the left, with complete flatness over entire right side. No respiratory sounds could be detected, excepting a few harsh sounds over apex. Over the left lung in-

creased respiratory murmur with a few mucous râles were heard. The case was diagnosticated as hydrothorax. A hypodermic needle was introduced into the right pleural cavity, between seventh and eighth ribs, several inches anterior to their angles, when fluid escaped freely. Not having an aspirator at hand, a small sized canula and trocar was introduced, and thirty (30) ounces of straw-colored liquid withdrawn. The breathing, color of lips and heart action all were improved, affording great relief. The liquid coagulated almost completely with nitric acid. The liquid began to re-accumulate, and all the symptoms gradually grew worse until April 1, when he was tapped as before, and twenty-eight (28) ounces similar fluid was withdrawn, followed by immediate relief. The following day the patient was quite feverish, and remained ill until the 8th, when eight ounces dark-colored fluid was withdrawn. The relief was instantaneous and more permanent than before, the fluid accumulating less rapidly. It did not become necessary to tap him again until May 15, when an aspirator was employed, and eighteen (18) ounces clear serum withdrawn. From the last date he improved steadily, no fluid, necessitating an operation, accumulating thereafter.

June 26. Patient is able to walk half a mile without fatigue. The physical signs at present are dullness over entire right side, due, possibly, to the partial expansion of the air vesicles, and the accumulation of fibrin on the costal and pulmonary pleura. Mucous râles are heard over entire right side. His general health is improving rapidly; has gained several pounds in weight; eats and sleeps much better than formerly. The treatment consisted in good nourishment and tonics, and later, out-door exercise. As for the diagnosis of Bright's Disease, at the County Hospital, I would state that I frequently examined his urine with nitric acid and heat tests for albumen, and under the microscope for tube casts or other evidences of renal disease, but failed in every instance to discover any evidence of disease of the kidney. While in the hospital, he informed me he was under homœopathic treatment. He was discharged cured, July 2.

LIGATION OF FEMORAL AND EXTERNAL ILIAC ARTERIES.

J. M., aged 21 years; had syphilis three years ago; gonorhœa four weeks ago, and suffering, when admitted, from acute

orchitis. On October 22, 1882, while attempting to alight from a freight train while in motion, he sustained a compound comminuted fracture of left tibia and fibula, necessitating an amputation of the leg, upper portion of middle third. Dr. D. B. Fonda, of Jefferson, performed the amputation, making a long posterior flap. The patient was then sent to the infirmary for subsequent treatment, eight hours after the accident. Upon examination, after admission, he was found poorly nourished, and somewhat exsanguinated. The flaps had been brought into close apposition with a large number of interrupted sutures. Failing to find the ends of any ligatures externally, I concluded that they had in some way drawn within the flaps during his removal, or some absorbable material used as ligatures and cut off close to the ligated vessels. Hot water applications were directed to be applied continuously. The temperature was normal; pulse slightly accelerated.

Oct. 26. Stump swollen and inflamed. Evidence of accumulation of pus in stump being present, several sutures were divided, when the flaps separated widely, and considerable poorly-conditioned pus escaped. Drainage tubes were inserted, and the hot-water dressings continued.

Nov. 9. The stump is daily growing worse; fully one-half of posterior flap has become gangrenous. The remaining sutures have been divided, and the flaps are supported by means of strips of adhesive plaster. The ends of both bones are protruding, and a large bundle of silk ligatures, cut closely to the arteries ligated, is seen at bottom of wound, accounting for their absence externally at the first examination. I left the institution on a ten days' vacation on this date, leaving Dr. Morgan, of the Cook County Hospital, in charge. As soon as the line of demarcation was established, and not sufficient tissue remaining to cover the ends of the bones, he cut a fresh flap out of healthy tissue, and removed about an inch and a half of the bones Nov. 16. On my return to the institution, Nov. 20, the patient was doing well. He improved until Nov. 23, when, at 1:40 P.M., a free secondary hæmorrhage took place from stump; styptics and pressure controlled the bleeding. He lost about two ounces of blood.

Nov. 24. At 8:15 this P. M. had a second and more profuse hæmorrhage: separated the flaps, and found the anterior tibial artery bleeding per saltum. After several ineffectual efforts to ligate the bleeding vessel in stump, it was decided to ligate femoral in Scarpa's triangle. Several ligatures were first placed around anterior tibial, but owing to the degenerate condition of its coats, they invariably cut completely through the vessel. With the assistance of Dr. Alex. Theummler, the femoral was ligated about five inches below Poupart's ligament. A vein of considerable size, lying in front of the artery, was crowded to one side. The patient recovered readily from the shock of the operation, and in a few days showed marked signs of improvement, in increased circulation of blood in lips, improvement of appetite, sleep, and spirits.

Dec. 4. The ligature came away while changing dressings this morning. The patient is improving steadily.

Dec. 7. In passing through ward to-day found the patient sitting up in bed. He was whistling and feeling in the very best of spirits. I cautioned him about the danger of overexertion causing a hæmorrhage from femoral.

Dec. 9. At 11:20 this P. M. had a profuse hæmorrhage from femoral at seat of ligature. The hospital nurse, acting under previous instructions, wound a rubber bandage as tightly as possible above seat of hæmorrhage, completely arresting it. After a consultation with Drs. Spray and Theummler, and with their assisance, ligated the external iliac artery. After the patient was anæsthetized, carried an incision about three and a half inches in length, an inch above and parallel with Poupart's ligament. After the primary incision the transversalis fascia was divided upon a grooved director. Pushing the peritoneum to one side the pulsation of the artery could be plainly felt. The vein was to the inner side and slightly overlapping the artery. After separating the two with the handle of a scalpel, the aneurism needle was passed around the vessel from without inwards, instead of the reverse, as usually recommended. The bifurcation of the common into the external and internal iliac arteries could be plainly felt by passing the finger along the ligated artery. The ligature was applied about midway between the origin of the ar-

tery and Poupart's ligament, to afford the greatest chance for a firm coagulum to form in either extremity of the vessel. The operation was performed by the partial antiseptic method.

Dec. 13. Had two chills this A. M., followed by high fever.

Dec. 15. Had one chill to-day. Pulse small and rapid.

Dec. 16. Pulse 112. Temperature 100°.

Dec. 17. Pulse 108; temperature 99. Feels better. Takes nourishment freely and with relish.

Dec. 18. Pulse 96; temperature 99.

Dec. 19. Had a chill to-day, followed by high fever. Pulse 156. Administered stimulant, freely, when pulse began to fall to 90 at 6 P. M.

December 21. Pulse 96. Stump pale and smooth.

December 26. Pulse 108. Appearance of stump about the same.

December 29. Pulse 120, and feeble. Temp. 102½°. Anterior border of tibia ulcerated through stum. Patient was delirious during the night. Small bed-sore has formed over central sacral region.

December 30. Very low, this P. M. Pulse 120, very feeble. Stump pale and cold.

Died at 10:25 this P. M. The general treatment consisted in good nourishment, tonics and stimulants. Quinine in five-grain doses, from 13th to 21st, and smaller doses throughout.

A post-mortem held twenty-four hours after death revealed the following conditions: Cadaver greatly emaciated. Incision for the application of ligature to external iliac ununited, with superficial sloughing. Heart apparently normal. Lungs and kidneys greatly congested, and very dark color. Stomach and intestinal tract normal. After the contents of abdomen had been removed, an incision was carried through center of Poupart's ligament, parallel to femoral artery, extending nearly to the knee, when the external iliac and femoral arteries were dissected out from above downwards. A firm coagulum, fully an inch in length, had formed in femoral, below the seat of ligature; the inner coat of artery was found adherent for several lines. The vessel above the seat of ligature was gaping, and no evidence of a clot could be found. The cause of the secondary hæmorrhage

from femoral was very apparent. Four unusually large muscular branches were given off from one to three lines above seat of ligature, allowing a free circulation of blood to the very seat of the ligature. This source of danger is not alluded to in any of the works on surgery at my command. The muscular branches were given off in the exact position where ligature of the femoral is recommended when the high operation is performed. From my experience in this case, if again called upon to ligate the femoral, would apply a ligature as close to the seat of hæmorrhage as practicable. My reasons for not ligating the popliteal were, the swollen condition of the limb in that region, as well as fear of a degenerate condition of the artery, as the anterior tibial would not bear a ligature, even when dissected back. The portion of the femoral and external iliac between the seat of the two ligatures was next examined, when the inner coat of the iliac was found firmly adherent, and could only be separated with difficulty. A firm coagulum was found in upper end of external iliac, extending nearly to the bifurcation of the common iliac. Slight adhesive inflammation had taken place between external iliac and surrounding tissues, the tissues at a distance of several lines from the artery presenting no abnormal appearance. The peritonæum presented a healthy appearance throughout. The epigastric and circumflex iliac arteries were given off immediately above Poupart's ligament, and directly opposite to each other. The specimen was carefully stuffed and dried, and has been preserved. I am inclined to believe that, had the patient been perfectly well at the time he sustained the original injury, he might ultimately have recovered.

FRACTURE OF PATELLA, WITH TREATMENT.

P. C., æt. 32 years, while playing "tack" upon the green, slipped, and in trying to regain his equilibrium sustained, through sudden muscular contraction, a transverse fracture of the patella at junction of lower with middle third. The upper fragment was displaced fully an inch. The limb was placed in an extended position and cold applications made use of for fifteen hours. The injured knee had been swollen and painful for several years previous to the accident, due to syphilitic rheumatism.

The dressing consisted of the usual single inclined plane extending for several inches beyond the heel, and raised about twelve inches at lower extremity; as this did not bring the fragments in apposition, an ordinary rubber bandage was applied in the following manner: The center of a strip twelve inches long and three inches wide was applied immediately above the upper fragment, when the rubber was stretched and either end fastened to side of splint with several tacks. The center of a second strip was carried in the same manner below the lower fragment and the ends fastened to sides of splints above. The fragments were at once drawn closer together, and at the end of twelve hours were in perfect apposition. This simple dressing was not disturbed more than twice during the entire treatment, extending over a period of six weeks. The tilting of the lower end of the upper fragment, usually so annoying, was entirely overcome by allowing the rubber band partially to overlap the upper fragment. The object of the lower rubber band is to fix the lower fragment. The elasticity of the rubber when thus applied makes a steady, equal traction, fixing the lower and gradually drawing the upper fragment downwards, as the muscular contraction of the rectus femoris is overcome. I claim the following points of superiority for this treatment:

1st. Simplicity, and easy application.

2d. Does not require as frequent renewals as non-elastic dressings.

3d. Makes continuous traction, bringing upper fragment downwards as the muscles relax.

4th. Fixes lower fragment, a point of considerable importance.

5th. Prevents the obstruction to the circulation which sometimes follows the application of the figure 8 bandage.

6th. Avoids the danger of severe inflammation sometimes encountered by the use of Malgaigne's hooks.

7th. The force applied can be regulated to a nicety, by increasing or diminishing the tension of the rubber bandage.

8th. Greater prospects of bony union, owing to closer apposition of fragments and immobility. One great objection to all non-elastic dressings, such as ordinary muslin bandages, is the

fact that as the swelling decreases or the muscles relax the dressings become loosened and are of no further use, while the elastic dressings exercise continuous traction. The "Malgaigne hooks" I should be loth to make use of under any circumstances. Owing to the syphilitic complication, the iodides were administered throughout the treatment. At the end of six weeks the dressings were discontinued, the patient walked on crutches for about a week, but soon was able to walk as well as before the accident, with no increase in his limp. The union is bony throughout, and it is with difficulty that the seat of the fracture can be made out at present. The rubber bands are so easily applied, and fulfill the indications so well that, in a majority of cases, they need not be disturbed during the entire treatment.

RESECTION OF TIBIA AND FIBULA.

O. N., æt. 34 years, well-digger, fell a depth of forty feet into a well near Lima, Iowa, sustaining a compound comminuted fracture of tibia; the fibula also was fractured about middle of leg. The leg was placed in a fracture box and extension applied for two weeks, when plaster paris dressings were applied for nearly five months. A very imperfect union having taken place, all dressings were discontinued. The leg at once began to bend backwards at seat of fracture, and, as the union became more firm, the leg could not be straightened. The deformity became so great that it was impossible for him to place his heel on the ground while in the erect position.

Being informed by the physicians who treated him that amputation of the deformed member was the only remedy left, he started for Chicago, hoping to find some relief in surgical interference short of an amputation. He was refused admission to the Cook County Hospital, Chicago, on account of the crowded condition of that institution, and was then sent to the Cook County Infirmary.

Upon examination, after admission, the bones at the seat of the fracture were found firmly united, a large provisional callus uniting the tibia and fibula into a common mass. The angle of deflection of the lower fragment was so great, that nothing but the extreme ends of the toes could be put to the floor while he main-

tained the erect position, and so painful was this position that he could not bear the weight of the leg upon the toes.

No history of syphilis was obtained, and his general health when admitted was good. Deciding upon a resection, with the assistance of Dr. Alex. Theummler, Assistant Superintendent of the Cook County Hospital for Insane, I performed the operation as follows: Carried an incision four inches in length along middle of anterior surface of tibia, directly over the seat of the callus, retracting both flaps as far as possible; next removing a triangular piece of bone three-fourths of an inch wide at base, extending completely through bones. The leg was then straightened, and two side splints well padded, extending from knee to an inch beyond the heel, were applied. The leg was suspended at an angle of fifteen degrees, and carbolized hot water dressings were applied continuously. The leg being perfectly straight and comfortable, the splints were allowed to remain for six weeks, when plaster Paris dressings were substituted for five weeks longer. When the splints were removed, slight motion could still be detected at the seat of the operation.

The plaster dressings had to be removed several times on account of erysipelas of the member, so severe that the life of the patient was threatened. When the plaster dressing was finally removed the union was firm. He at once began to use the member, walking with crutches for several weeks, gradually bearing more weight on the member, until not even a walking stick was needed to walk a distance of several miles. All pain had disappeared. The limb is one and one-half inches short.*

SYNOVITIS LEFT KNEE JOINT.

F. F., æt. 34 years; was admitted Dec. 27, 1881, with the following history: First noticed soreness and swelling twelve months previous to his admission. Was admitted to Cook County Hospital July 2. The excessive synovial fluid was remoned with aspirator and plaster paris cast applied and allowed to remain for two weeks, when it was removed, and extension substituted for two months. He was discharged as cured Dec. 14.

*Since the above was written, the patient passed through a severe attack of typhoid fever, recovering perfectly, and is able to use the limb nearly as well as ever.

After a few days of active exercise the pain and swelling returned, and he was transferred to this institution. When admitted the joint was greatly distended and very painful, the least motion causing great pain. He was at once sent to the hospital department, and extension applied by means of the ordinary adhesive plaster, rope and pulley appliance. The knee improved rapidly, but the extension was continued for nearly four months, when he was allowed to use the limb moderately. After a few days in the erect position the pain and swelling returned with increased intensity. Fly blisters and, later, pressure were resorted to, but the joint invariably became swollen and painful after a few days of moderate exercise. On Oct. 22 he applied to me for an operation to close a small cleft in palate, and when closely questioned admitted that he had had syphilis. Potassium iodide and hydrarg. bin-iodide were prescribed, and extension applied as before. At the end of three weeks all surgical appliances were discontinued and he was allowed to walk about the ward, and a few weeks later discharged as "recovered." He has been free from all symptoms of synovitis ever since, and works steadily in the asylum bakery, where he is compelled to stand upon the member several hours each day. The joint has been reduced to its normal size. The iodides are administered for several weeks at intervals of as many months. The interesting feature of the case is the undoubted specific character of the affection, as proven by the result of the treatment. Previous to the administration of the iodides the swelling and even most of the pain would disappear when the parts were placed at rest, only to return with increased severity after a few days of exercise of the member. After the iodides were administered the pain and swelling disappeared permanently after a very short interval of rest. I am satisfied that had the specific character of the affection been suspected, a permanent recovery would have followed his first admission to the hospital.

MELANCHOLIA WITH SUICIDAL TENDENCIES.

On May 22, 1882, I was called to see J. W., an inmate of the infirmary employed in the asylum bakery. I found him lying in bed, covered with blood, and still bleeding freely from external

jugular vein, which had been divided about the middle of its course. The wound had been inflicted with a shoemaker's knife ground to a sharp point. The wound was about two inches in length, very deep, and extending directly across the neck. The hæmorrhage was easily controlled by pressure, when the wound was closed, with several silk sutures. He was transferred to the infirmary hospital, where, on May 26, he made a very determined but unsuccessful effort to commit suicide by stabbing himself in nine places over abdominal region, with a pair of rusty scissors. Several of the wounds were quite deep, and it was feared had penetrated the peritoneal cavity. Owing to the position and character of the wounds, but little exploring was done, and it was not definitely ascertained whether the peritoneal cavity had been penetrated. Fortunately, the blades of the scissors were separated several inches; had they been closed, there can be no doubt that every stab would have entered the peritoneal cavity. On June 15 he was adjudged insane, and transferred to the Insane Asylum, where he made frequent efforts to commit suicide by suspension; also attempted to starve himself, and had to be fed with the stomach tube. His delusions were of a painful character. He imagined himself damned for committing the "unpardonable sin." The case is reported chiefly as an illustration of the persistency with which some insane patients strive to terminate their existence.

ARTICLE II.

DENTIGEROUS CYST LOCATED IN THE INFERIOR MAXILLA, DEPENDENT UPON AN INVERTED WISDOM-TOOTH, WITH REMOVAL OF NECROSED PORTION OF RAMUS, AND ENTIRE CONDYLE. REPRODUCTION OF THE LOST OSSEOUS TISSUE AND PERFECT MOVEMENT OF THE JOINT.

Read before the Chicago Dental Society, November 6th, 1883, by JOHN S. MARSHALL, M. D., Late Instructor of Dental Surgery, Medical Department Syracuse University.

GENTLEMEN:—At the request of our President, I promised to prepare an essay for this evening's discussion, but from the limited time at my disposal, I have been unable to do so; rather,

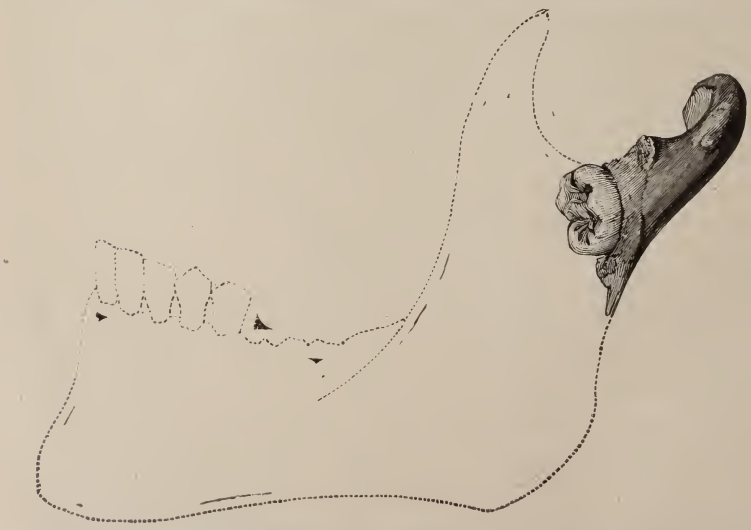
however, than disappoint you I will relate a case that came under my observation while in Syracuse, N. Y., in consultation with Prof. John Van Duyn, of that city, at whose suggestion and approval I have prepared the case for publication.

Anna T., aged 16 years, light complexion, well nourished and in general good health, consulted me November 21, 1881, at the request of Prof. John Van Duyn, for a swelling of the left inferior maxilla situated in the neighborhood of the molar teeth. The history is as follows :

In the autumn of 1880, the young lady first noticed a slight external swelling over the left inferior maxilla opposite the first molar tooth and just above the base of the jaw. In August, 1881 the swelling having increased in size, and the first molar, which was badly decayed, having become quite loose, she consulted a dentist, who pronounced it a case of alveolar abscess, and extracted the tooth. When the case first came under my observation, the tumor of the jaw was about the size of a hen's egg, and the swelling extended to the maxillary articulation and in front of the ramus. The wisdom-tooth of that side was not erupted and the second molar was quite loose. There had been pain occasionally on taking cold, but only slight and of short duration. Pressure over the tumor produced indentation of the tissues with a peculiar parchment-like crepitation. There was slight tenderness of the parts, but no discoloration, though some difficulty was experienced in opening and closing the mouth, but still she was able to masticate food upon the right side. The exploring needle revealed the contents of the tumor to be straw-colored serum. With the tumor of the jaw there existed a goitre of small size. The diagnosis was dentigerous cyst, dependent, in all probability, on the unerupted wisdom-tooth, and we advised operation for its removal. Saw the patient again on December 18th. In the meantime she had had the second molar removed, by the advice of another dentist, and said a small quantity of thick tenacious fluid was discharged from the alveolus, resembling in consistency the white of an egg. During the previous few days, the tumor had grown rapidly to nearly double its former size, and extended from the site of the first molar backward and upward to the maxillary articulation. December 19, 1881, operated upon

the patient, at her home, for the removal of the offending tooth. She was laid upon a table with the shoulders and head slightly elevated, so as to get a clear view of the parts, and placed under the influence of ether. An incision was then made through the tissue in a longitudinal direction with the jaw, from the angle to the second bicuspid tooth upon the summit of the gums, and a transverse incision in the region of the second molar.

The contents of the cyst were then removed, which consisted of a thick dark yellow serum, slightly mixed with pus; in quantity at least four ounces. On passing the finger into the cyst several sharp spiculæ of bone could be felt upon the sides and bottom of the cavity,—probably the remains of the alveoli of the extracted teeth,—and in the posterior part of the cavity well up towards the sigmoid notch and at the base of the condyloid process, the wisdom-tooth could be distinctly felt; it was in an inverted position, the grinding surface directed downward, forward, and outward, and incomplete in development,—the crown only being formed. (See cut.*) This was easily dislodged with an elevator, and extracted by the aid of the bullet forceps.



*The dotted line describing the sigmoid notch should have been carved a little higher up on the superior surface of the condyloid process.

It was now revealed by a further examination that the condyloid process and the posterior part of the ramus were separated

from the coronoid process, and the anterior portion, and detached from the surrounding tissues, the periosteum having been entirely separated from this portion of the bone; this was removed through the cyst and incision in the mouth. The extracted condyle showed evidences of necrosis, and upon examination it was further discovered that the cyst had extended so far upwards and backwards as to nearly sever the condyle from the coronoid process and body of the jaw, and the force applied to dislodge the tooth, though very moderate, no doubt completed it. The condyle was also separated from its fibro-cartilage.

Although the lower part of the ramus, posterior part of the body, and the entire condyloid process were lost, it was deemed best to crush the lateral walls of the cyst, which were so thin that they were not capable of giving any measure of support to the remaining portions of the jaw. None but favorable symptoms followed the operation, regular visits being discontinued December 28, 1881. The wound entirely closed at the end of a few weeks, the discharge having been very small in amount. August 20, 1883, I had the opportunity of seeing the young lady, and found a fully formed ramus and articulation with very little deformity—only a slight flattening of that side was observable, in the region of the angle and ramus of the jaw. The mobility of the joint and the functions of the jaw are perfect and the patient not conscious of any defect. The favorable results of the case were largely dependent, no doubt, upon the periosteum having been left almost entire and the absence of extensive suppuration, as evidenced by the fact that but little pus was found in the cyst.

Malgaigne was the first to lay down the rule that as far as possible the periosteum should be preserved in resections, and out of this has grown all the operations of conservative surgery known as osteoplasty.

Osseous tissue is, however, sometimes reproduced from the soft parts surrounding the bone, as demonstrated by the researches of such pathologists as Duhamel, Müller, Sömmering, Heine, Seymour, Wagner, Flourens, and others.

The remarkable features of this case are the position of the wisdom-tooth, viz., at the sigmoid notch; the death of the condyle, in all probability from the presence of the fluid, and the

seemingly almost perfect reproduction of the lost ramus and condyle, together with the restoration of the mobility of the articulation and functions of the jaw. Reproduction of bone is more frequent in the lower maxilla than in the other bones of the face, but the regeneration of so large a portion, including the temporo-maxillary articulation, is very rare.

Garretson mentioned the case of a little German boy six years of age, upon whom he operated for the removal of a necrosed full half of the lower jaw, the result of an attack of measles, which, at the end of two years, was so completely reproduced as to give natural motions of the jaw, and to leave a scarcely to be observed deformity.

Heath cites also a single case, that of a man 22 years of age, who came under his care for the removal, for necrosis following typhoid fever, of the whole body of the lower jaw, including about a third of the right ramus and the condyle. The operation was performed March 3, 1869, when the body of the jaw was removed from the right angle to the second bicuspid tooth of the left side. June 16, a second operation was required to remove a portion of dead bone from the right ramus, and again on October 30, a third operation was demanded, and the entire right condyle, with about a third of the ramus, was removed. Mr. Heath says, "Perhaps the most singular feature in the case is the fact that the man has now (December) as perfect movement of the jaw as if no disease had existed, notwithstanding that at the last operation, the whole of the right condyle was removed entire, with about a third of the ramus. The repair has, in fact, been as complete as possible." So far as I have been able to ascertain, very few cases are on record in which so large a portion of the jaw and condyle were reproduced, with perfect mobility of the joint.

ARTICLE III.

REMARKS ON THE WASHING OUT OF THE STOMACH. By Dr. A. C. L. RAMSAY, Chicago.

Of this promising measure lately introduced as a therapeutical agent, little is generally known in this country.

The instruments generally used for the operation are—the pump of Kussmaul, the instrument of Dujardin-Beaumetz, the siphon-tube of Prof. Faucher, the ingenious instrument lately devised by Dr. Victor Andhoui of Paris.

For good and thorough work, and especially for hospitals, the last-named instrument is by far preferable, but for the average practitioner the siphon-tube will be found more adaptable for two reasons:

1st. The great facility with which it can be introduced, the patient being able to introduce the tube himself after a few sittings. 2d. Because it can be improvised almost everywhere, a piece of rubber tubing, four and one-half to five feet in length and of sufficient caliber, can be easily obtained, and every well regulated household has a common tin funnel which completes the instrumental outfit.

I will first describe the operation and then review the use of it in deseased conditions of the stomach.

The patient should be in the sitting position, the head looking directly forward at almost a right angle with the vertebral column. Prof. Constantine Paul prefers reversing the patient's head backwards in order to introduce the instrument vertically. Both methods are good, one succeeding better in some cases and vice versa. The spasmodic contractions of the pharyngeal muscles generally renders the first introduction very difficult. The application of a solution of bromide of potassium with a spray to the pharyngeal walls will be of great use in those cases. Then we introduce a common rigid œsophageal sound. After the second or third introduction, all spasms will be reduced to a minimum and the siphon-tube can be introduced simply by the patient going through the act of swallowing. A line drawn across the tube at eighteen or twenty inches from its free extremity will, when touching the lips, indicate that the tube has reached the fundus of the stomach, but this is generally useless as the rebellious action of the muscular coats of the stomach will always indicate that the tube is far enough.

It should be borne in mind that sometimes there is a great escape of gasses and often of the contents of the stomach, a hint well worth remembering, as both the patient and physician

are liable to have soiled linen when it is overlooked. The tube should be well oiled and, it is needless to say, of smaller caliber for females. The tube being introduced, its free extremity is raised above the stomach as much as possible, and the funnel is applied to the end, water, preferably summer-cold, is then poured in, from one to two quarts, according to the capacity of the stomach. Then by bringing the funnel below the epigastrium the water can be seen filling the funnel and holding the contents of the stomach in suspension. This must be repeated two or three times using warm water for the last washing. The operation is generally concluded by introducing four or five ounces of warm milk in the stomach. The gaseous mineral waters are highly spoken of by the Germans in the washing out of the stomach, the sedative action of the carbonic acid gas, rendering the operation more pleasant to the patient. Dr. Andhoui reports wonderful results with the waters of Châtel-Guyon.

The Germans prefer alkaline waters, giving as their reason that the introduction of an alkaline fluid in an acid stomach is attended by the evolution of a certain amount of carbonic acid gas and acts as a local sedative.

It is a good plan after the operation to tie a large bandage snugly over the stomach, to prevent dilatation of the pyloric orifice, but where there is piloric stenosis this would seem to be a desirable result to obtain. It is well to have the patient walk about for a little while after each operation.

Twelve years ago Prof. Kussmaul first began advocating washing out of the stomach, with his pump, in what Chornel has so ably described in his work, "Des Dyspepsies," as the dyspepsia of liquids (dyspepsie des liquides), but which in reality is nothing but pure and simple dilatation of the stomach; and there is no disease where it will do more effective work than in the above. That is especially true in the dilatation caused by the gastritis of drinkers where the dilation seems to be due to a partial atrophy of the muscular coat of the stomach. The results are most wonderful, from a state of inanition the patient passes into one of improved nutrition and comfort.

The vomiting, which is such a constant symptom in those cases, disappears, and when the case is not accompanied by cirrhosis

of the liver a speedy cure is effected, while when the unfortunate complication of cirrhosis is present, the patient is made quite comfortable and life is prolonged sometimes months when it was a question of weeks before the washing of the stomach was resorted to.

It is wonderful what dimensions the stomach will attain in cases of dilation, especially in habitual beer drinkers. I remember being present at a post mortem examination, held over the remains of an ex-saloon-keeper, where on dividing the abdominal walls in the mesial line, nothing but the enlarged stomach was to be seen. The intestines were crowded below and at the sides of it. Prof. Constantine Paul is authority for the statement that a patient at the Hotel Dieu of Paris had such an enormously distended stomach that it would hold forty-nine liters of water. The best time for the operation in those cases is at bedtime, when it will be found to prevent the usual vomiting the next morning.

Its use in cases of poisoning need not be commented upon. In obstinate cases of vomiting of pregnancy, where, as Prof. Delaskie Miller so ably pointed out, the excessive acidity of the secretions of the stomach is the greatest obstacle to overcome, I think the measure worthy of a trial.

ARTICLE IV.

REPORT OF A CASE OF OVARIOTOMY. By W. H. KANE KING, M.D., Mt. Sterling, Ill.

On Monday, October 8th, I was called in consultation with Dr. G. H. Tebo, to examine Miss W., aged 23, living four miles in the country, the doctor diagnosticating ovarian disease. The patient had first observed enlargement one year before, but now the tumor reached the middle of the third stage (Peaslee). Fluctuation being marked, the aspirator withdrew eight liters (seven quarts) of thin, straw colored fluid, after which the polycystic nature of the tumor was apparent. Fluid straw color; alkaline in reaction; sp. gr. 1018; no albumen, paralbumen, or

metalbumen in fluid from the main cyst. The fluid of the other cysts was not tested. On boiling with nitric acid an exceedingly fine, dense foam rose high above the fluid, and remained there after cooling, a circumstance I have not before observed in testing fluids from the cervix. The following Monday was set for the operation, and Dr. Tebo kindly asked me to perform it We placed the patient on a fluid diet; on Friday night gave calomel and soda; on Sunday morning, oil; and Sunday night a dose of codia. On Monday morning, quinia gr. x., with nothing to eat after 8 o'clock. My home assistant, Dr. Lizzie White, had carefully prepared sponges, ligatures, and finger cloths, boiling them in a carbolated solution, and at 1 o'clock the instruments were lying in a warm solution of the same disinfectant. A tub of warm salt water stood under the table. The patient was etherized, and placed on the table by Dr. Owen Fulton. The room had been whitewashed, divested of furniture, and the floor sprinkled with carbolized water. Assisted by the above and Drs. Baxter and Mears, I proceeded thus: An incision in the usual place below the umbilicus, four and a half inches long, exposed the refilled tumor. All oozing was stopped, and not one drop allowed to reach the peritoneal cavity. The main and some minor cysts were then emptied with trocar and tube. The point of puncture was tied. No adhesions found. A very short, wide pedicle involved the whole left ligamentum alaris. I transfixed it with a needle armed with double ligature, locked and tied it in halves; another strong ligature was passed around the base of the tumor, and the pedicle was surrounded with a finger cloth, and severed with scissors. Then I frosted the cut end of the pedicle with a warm iron, and left it, not poerated, but only a half inch long, standing at right angles with the uterus and touching nothing. So far scarcely one drop of blood had contaminated the parts. Yet a sponge wrung from a solution of sodium was passed to the most dependent part. A sponge on the end of a catheter was now placed in Douglas' cul-de-sac, and a piece of carbolized flannel placed over the bowels. The external opening was closed by four silver and seven silk sutures. The former were thus arranged: A needle armed with a "carrier thread" carried the wire from the peritoneal side (always) one inch from the cut edge

to a point on the skin one inch from the cut. In this way the four wires were first placed on one side only. Then a carbolized pine slat, with rounded corners and ends, of suitable length, was perforated with an awl, to receive the ends of the wire. A large glass bead was placed on each, and they were then tied, the two upper together and the two lower. Then the other ends were carried in a similar way through the opposite side. The flannel and sponge being now removed clean, the perforated pine, quill, and the beads were adjusted, and the wound closed, great care being observed to coapt the peritoneal surfaces throughout the extent of the wound. Seven light silk sutures closed the wound *perfectly*. The usual carbolized (oil) dressings were applied, and the patient "hot bottled" in bed. In one hour she awoke, as if from gentle sleep, and evinced none of the shock usually observed. The time occupied was one hour and a quarter, which was mostly consumed in means directed to prevent the fluid or blood from entering the abdominal cavity, mopping, etc.—time, as I believe well spent. The fifth day, union being perfect, the silk sutures were removed, and on the ninth day the silver ones, not one drop of blood, pus, or oozing could be discovered. The temperature averaged about 99⅞102 it reachedwice½. Quinia in large t ; doses was then given ; at other times in small doses. She vomited once on the second and third days. The concavity of the abdominal surface at any time would have held a cup of water (due to preparatory treatment). Dr. Tebo informs me to-day that she is doing well, and is able to sit up. This is the second case successful here in pure country air, and I doubt the propriety of operations of this kind in crowded cities and hospitals.

ARTICLE V

INTERESTING CASE OF REPAIR OF TISSUE AFTER INJURY. By W. T. Becker, M.D., First Assistant Physician, Milwaukee Insane Asylum, Milwaukee, Wis.

The following case of repair of tissue after an injury I thought of sufficient interest to make known to your readers: On the 16th of June last, Miss. T., æt. 23, while ironing linen

at a mangle, caught her right hand between the rollers of the machine, and in rapidly withdrawing it the soft tissue of her middle finger was severed at the second phalangeal joint. The severed portion of finger was lost in the machine, while the denuded bone was still intact. Immediately after the accident I saw the patient. The hæmorrhage was slight, because of the lacerated nature of the injury, the bone was entirely bare down to the head of the first phalanx, the periosteum appeared destroyed at some parts. Later, the severed finger was found; it resembled in shape the finger of a glove, only somewhat thicker, being hollow in the interior, having the nail upon it, and containing part of the tendon of the deep flexor muscle. This glove-like appearance suggested the grafting of it around the bone, which would have been done had its discovery been more timely. Sloughing was anticipated, and the question of amputation presented itself; it was decided to wait to see how much reparation would ensue. Accordingly, the parts were washed in dilute carbolic acid solution, and dressed in vaseline ointment, merely as a protecting dressing.

Reparation began quickly, granulations springing up about the soft end of the remaining digit, and spreading until they reached the top of the bone, which they eventually covered. In the meantime, the pellicle formed and spread, and the epidermis was reproduced, until the finger assumed its original proportions. During the healing process compound tinct. of benzoin and Peruvian balsam (sometimes both, and in varying quantity,) were mixed with the ointment, when the granulation tissue required stimulation.

At first, a dense white tissue occupied the site of the nail, which it was supposed would permanently assume its function. Subsequently, however, a real nail was reproduced. The use of the hands, which in the absence of this result, would have been seriously interfered with (being the right one, and the lady being a pianist,) has suffered little permanent improvement.

This case presents an interest because the nature of the repair assumes more nearly the character of a reproduction. It cannot, however, be considered as such in the comprehensive sense in which that term is applied in surgery, but merely as reparation,

not remarkable so much for its extent as its form. Complete reproduction is only found to prevail in the lower organisms, where members of complex structures (even such as the heads of Hydræ) when severed, will be reproduced. The degree of reproduction diminishes as we ascend the scale of organized beings. In the higher animals it becomes only partial, and in the human species its manifestations are at a minimum, and confined only to that group of tissues which develop from the external of the embryonic layers.

ARTICLE VI.

TREATMENT OF TRICHIASIS BY ELECTROLYSIS. J. ELLIOT COLBURN, Surgeon at Central Free Dispensary, Eye and Ear Department; Assistant Surgeon at Illinois State Eye and Ear Infirmary; member of Chicago Society of Otology and Ophthalmology.

One of the common causes of diseased cornea is displaced or misdirected cilia. They may be irregular in growth, but one or two hairs sweeping the cornea; or the whole tarsal border may be covered by a dark and strong, or pale and stunted growth of lashes, causing great irritation of the cornea, loss of epithelial substance, followed by ulceration, inveterate pannus or ulcers. causing prolapsis of the iris, anterior synechia and atrophy of the globe. This abnormal growth of the cilia may be spontaneous or caused by chronic inflammation of the conjunctiva of the margin of the lids as in *tinia tarsi*, or *traumatisms*, as burns, wounds of the eye, etc. Trichiasis or districhiasis may be followed by or complicated with entropium in trachoma. The irregular growth of lashes will cause great irritation, producing excessive lachrymation and photophobia, or sensation of foreign body in the eye.

The diagnosis of districhiasis is easy, but in trichiasis the lashes may be so pale and minute as to escape detection. For this reason it is well in all superficial diseases of the cornea to examine the borders of the lids with a three inch lens and a strong light. The treatment of trichiasis consists in the prominent re-

moval of the displaced lashes and the treatment of such complications as may occur. The methods of treatment described in our text books are quite formidable and not altogether satisfactory, as they result in more or less deformity of the lid and destruction of tissues. The method which we have used in more than fifty cases, twenty-two of which I have been able to observe through periods of from six months to three and a half years, is the use of electrolysis as applied in the removal of hirsuties of the face, as described by Drs. Fox, Hays and others. The instruments necessary are first, a galvanic battery of six or more cells; second, a light needle holder armed with a suitable needle. This is a very important instrument. The one that I have found the most convenient is made by drawing the temper of a jeweler's broach, No. 6, and repointing on an emery stone. The patient being placed in strong light, the surgeon fixes the lid in a Desmares or Knapp clamp. The patient holds the handle of a positive electrode in the right hand and places the moist sponge on the palm of the left, after the needle is introduced into the hair gland. The needle may be withdrawn after about ten seconds. The patient should remove the sponge from the left hand simultaneous to the withdrawal of the needle.

The number of cells to be used should be decided by the surgeon's knowledge of the condition of his battery. I used from six to ten cells of zinc carbon battery. When the hairs are very fine and obscure, the use of a *three-inch* lens will be found quite serviceable. After electrolysis, the cilia should be removed with epilation forceps. The only objection to the operation in my experience, is that when there is a large number of cilia to be removed, the pain becomes somewhat tedious, though with the clamp I find the pain is not so great. Only about fifteen per cent. of the cilia return. The irritation following the operation is slight. The lids will be swollen for a day or two. In one case, from which I removed but two or three hairs, the operation was followed by the growth of 15 or 20 minute cilia, which were permanently removed.

I have noticed that chelazion and other cystic tumors of the lids would be very rapidly absorbed, when treated from 15 to 20 seconds with the same needle.

My record shows more than fifty cases, and in all, so far as I know, the results were good. In twenty-two cases which have been under observation for more than six months, since the last operation there has been no return of the lashes removed. We have used this operation at the State Eye and Ear Infirmary, and at the Central Free Dispensary, in simple trichiasis; entropium. previously operated on, and but partially successful, leaving a few misdirected hairs sweeping the cornea; also, in cases of entropium which are unfit for operation. In too dense growth of cilia, that sometimes occur in scrofulous children, and interfering with sight.

All diseases which interfere with the refracting media of the eye are of great moment to patient and physician. Among the most important are those affecting the transparancy of the cornea and the regularity of its surface.

Article VII.

On the Treatment of Habitual Constipation by other than medicinal measures.

By Henry N. Josselyn, A.B., M.D., late Interne of the New York Hospital. Omaha, Nebraska.

I purpose, in the following pages, to do what I think I have not seen or heard done before. The fact that no previous attempts of the same sort have been made, is probably best explained by the very simplicity of the subject and the readiness with which the questions involved in it may be answered. My reason for attempting the task at this time, is the constant demand made upon physicians for a method of relieving habitual constipation without a resort to medicaments. What I shall say in this connection will be expressed in the simplest possible language, and with resort to as few technical terms as possible. This is done in the hope of making suggestions as to the course worth pursuing in explaining to the ignorant, matters with regard to which they are often in sore need of information.

It is both fortunate and unfortunate, that the chief attention of the medical mind has been given to the solution of the graver

problems, which are suggested when life is threatened by disease. When these problems are pressed upon the attention it is with an importunity which is altogether terrible in its earnestness. If an aneurism is enlarging daily, there may be a fatal answer to the question: "What is to be done for its relief?" If a lung become tuberculous, it is of paramount importance to know what the future of such an accident shall be. But, for one person who has a pulmonary phthisis or a distending aneurism, there are a thousand who suffer from constipation. A disorder of this grade is popularly held in such light, that there are probably few students of medicine who would not feel justified in prescribing for its relief; while the druggist who could refuse to respond to the modest request made across his counter for a cathartic pill or other "opening medicine," would be generally set down as on the high road to a disastrous loss of patronage.

How to cure a common cold, how to relieve constipation, headache, and the ills that in popular estimation possess no greater gravity, are, it is true, questions daily answered and effectively answered by the practitioner; but the field none the less has been well contested by the charlatan, and by the man with a patent or a secret. It would be difficult to decide whose trophies are most numerous, but the chances are immensely in favor of the privateer. The "almanac," the brilliantly printed poster, the elaborately designed label, with all the other devices which wealth can command and ingenuity can execute, irresistibly affect the many. The windows and counters of the apothecary are more eloquent than the dissertations of the popular science publications. Indeed the most popular of all sciences in this day, seems to be associated with the art of delusion.

It might, perhaps, be regarded as an exaggeration, if it were said, that for the relief of what for want of a better term may be called chronic constipation, no single article of those recognized in the pharmocopœia, sold in the shops, or dispensed among the ignorant, suffices to secure the desired end. Nevertheless, this is a statement of exact truth. In the large majority of cases, it is by no means difficult to move the bowels. Yet it is precisely in the majority of all cases of chronic constipation that the common complaint is made: "I have tried everything

and without success. My bowels can be evacuated once or more often by taking purgative medicine, but I am invariably left either in my former state. or even more constipated than before." The testimony on this point is uniformly alike. There are few physicians of practical experience who are not ready to admit that, while it is not generally a matter of difficulty to secure one or more alvine evacuations by the aid of medicaments, an attempt to break up the constipated habit is often a very serious matter, and even one sadly hindered at times by the very measures effectually employed to produce catharsis.

The larger number of the medicaments employed by the mouth for the purpose of emptying the bowels, operate either by stimulating the secretions of the intestinal glands, or of glands situated in physiological nearness to the latter; or by a stimulation of the bowel action by either a direct effect upon its muscular envelope, or by an indirect effect through its nervous connections. It is idle to deny, that the system and the bowel, the nerve and the muscle, the liver and the gall-bladder, all tire after continual solicitation; and, finally, be it ever so urgent, refuse to respond. It would be strange indeed if this were not the case. It would be a striking exception to a well recognized law, if this great complex excretory system did not, like all the other systems of the human body, cease after a time to utter its protest to the somewhat harsh and often brutal treatment to which it is subjected. The living muscle, after a time, will no longer contract when the electric current flashes through its fibres. The keenest appetite will pall after both satiety and surfeit. The jaded bowel no less than the jaded beast of burden, will in the end despise equally the lash and the spur.

It is quite unnecessary in this connection to enlarge upon the evils of habitual constipation as they are recognized in organs of the body other than the bowels themselves. As, in the state of fever, the entire economy suffers, so in its several systems, it may betray evidences of disturbance due to constipation, ranging from the slightest degree of perversion of function, to high grades of suffering. The brain, the sympathetic nervous ganglia, the blood-vascular system, the skin, the genito urinary tract, in brief, every region and every viscus may thus participate in the imper-

fect performance of the function of the great excretory conduit.

It is necessary, however, to freely admit, as all well-informed persons are willing to admit, that that condition which might be called in one person habitual constipation, may in another be consistent with perfect health. Every physician has met persons, of whose excellent physical condition not the slightest doubt could be entertained, in whom each ingestion of food by the stomach was followed by an alvine evacuation. Every physician of experience has also known individuals presenting all the appearances of sound health, whose rectum was habitually emptied but once every three or four days, and even but once in the week. This wide range of performance of function with strangely separated limits on either hand, is peculiarly true of the human animal. We can explain to a degree both its conditions and its possibilities, when we reflect upon the difference between the Esquimaux living in a temperature from twenty to seventy degrees below zero, his stomach stuffed with blubber and his skin protected by thick, furry garments, and the naked Fellah of Egypt, subsisting without difficulty on a little rice and a handful of dates. A decision as to the question whether, within these limits, the function of the bowel is or is not properly performed, will depend of course upon the existence of subjective or objective symptoms which indicate disturbance of the general economy.

The causes of the form of habitual constipation, to which attention is here particularly directed, are both numerous and varied. The causes fully recognized in the text-books treating of the subject, need not, of course, be here fully described. The derangement of nerve, of muscle, of secreting epithelial pouches, the direction of the bodily energy in excess to other organs (hyperidrosis, enuresis, etc.). the lack of intestinal juices, the absence of peristalsis, the effect of ingesta, including those articles having a toxic or narcotic effect—no need, indeed, to enumerate all these. For the present purpose it will be more pertinent to inquire what conditions lie behind all these others; what causes the failure of the secretion, the tiring of the nerve, the weakness of the muscle. Is there a condition, or are there

conditions, lying at the base of this complexus of symptoms, by whose recognition we may reach remedial measures capable of better effect than scammony, mercury, castor oil, or the lately suggested substances whose very names would have made our fore-fathers in medicine stare with unfeigned astonishment?

Such a condition does exist. We all in some degree recognize it; though, like everything else that lies within the range of a common experience, it is apt to be ignored. Few swimmers speculate on the specific gravity of their bodies and of their limbs. Of all who look upon a tree, but few will detect the exact outline of its leaves. And so the conditions imposed upon humanity by its modern civilization, especially upon the men and women congregated in cities and towns, furnish the sole explanation that is needed for our present purpose. The Romans who formed the legions that Cæsar led into Gaul; the rank and file of the regiments that take the field to-day; the American Indian on the plains; the native African sunning himself lazily on the banks of the Congo River—these have no troubles of the kind recognized every day in the hard-worked seamstress, the over-taxed man of business and the fashionable woman of the period.

It would be impossible, in these limits, to fully discuss the several elements which together constitute the main source of this disorder prolific of so many others. It will suffice here to briefly touch upon a few of the most important among them.

First, both in importance and frequency of effect, may be named, the failure of sufficient bodily exercise.

It may well awaken surprise to hear it soberly stated that Americans, who are so often accused by their English brethren for the restlessness of their activities, actually suffer from a lack of physical exercise. It is nevertheless to a great extent true. The day-laborers and hand-workers of this continent are not very largely Americans by birth. The men born on this soil who live in its towns and cities, are, during the day, chiefly occupied at the counter, at the desk, in the ware-rooms, or "on 'Change." Exercise of a certain sort they get, wearing equally upon mind and body, but never of the generous quality which is his who ploughs, who digs, or who lays brick. The constipated

man, to whom we refer, drives to and from his place of business in his own equipage, or bestows himself within the offensive compass of a city railway car, where persons of both sexes are huddled together morning and evening in disgraceful and even dangerous proximity. During the day he sits at his books or stands at a desk, his muscles dwindling, his blood propelled through his languid veins more feebly with every year. He would look upon a walk of ten miles as a punishment rather than as one of the readiest sources of the delight and pleasure of healthy living.

When we turn to his wife, his daughters, and his sisters, the picture in all ranks of society is a wretched one from the physical point of view. Their representatives in the lower classes drag out joyless days in the boarding house, from which they issue only to visit the shops and the apartments of their friends, or to seek the unreal and unhealthy attractions of the theatre. If they are occupied with the cares of a domestic establishment, or, to use their own language, the burdens of "house-keeping," they have neither time nor ambition for much beyond. Aside from the inevitable excursion to the shop, the market, or the house of a neighbor, they neither take nor crave any exercise in the open air which can be deemed sufficient for the purposes of health. Many unmarried women, employed as seamstresses, clerks, factory girls, shop women, etc., exercise, without doubt, to the point of weariness within the four walls where they are engaged in labor, but without that measure of healthful activity of the body and limbs which they really need. In the upper ranks of society, the days are spent in an almost pitiful idleness. The occupations of the drawing-room or "parlor," of the piano, of the social call, of the drive in the carriage when the weather is fair—these are well nigh the sole employments of the body which they at any time either undertake or even dream of undertaking. They would, for the most part, regard him as guilty of either eccentricity or folly, who would intelligently direct them to take a sufficient amount of exercise by pedestrianism or by exercising in any other suitable way so as to arouse their viscera from an habitual torpor.

Even their babies are wheeled indolently about the streets in

delicately upholstered "baby carriages" on wheels, instead of being carried about in the arms, an exercise which not only employs the muscles of the mother, but which makes no little demand upon the muscular vigor of the child. Many of the infants in our large cities would be far better in health if their carriages were destroyed and they themselves were left where nature first put them, in the arms of their mothers and nurses.

Are these women they who suffer from habitual constipation? The gynecologists, consulted about so many ills of the uterus and other pelvic viscera, can give a convincing answer in the affirmative. Constipation is, without question, the rule and not the exception in this class of patients. Its long and dreary history, including the occurrence of "blind" and bleeding piles, prolapse of womb or bowel, leucorrhœa and other pathological vaginal discharges, pain, aching, an indescribable sense of languor and weariness, often complicated by pregnancies when the physical state is utterly unfit for child-bearing and the mental condition equally unfortunate for the obligations of the parent,—all this is abundantly well attested in the pallid, sallow skin, flattened bosom, flabby figure, and general appearance of the worn woman, the burden of whose complaint occupies so large a space in the records of medicine. I have dwelt somewhat more fully upon the afflictions of women, simply because the picture presented by them is rather more vivid and instructive than in the opposite sex. The indolence, voluntary or enforced, of so many women; the tender provision for their wants, usually accorded with generous fulness by their natural protectors; and the fatal ease with which their lower pelvic basin tolerates, without the production of distress, a distended rectum, these are sufficient reasons why they should suffer above others.

The second of the great causes of constipation to which I desire to call attention, lies in the numerous errors committed with respect to ingesta. I shall briefly speak of these as they naturally arrange themselves into errors respecting food, drink, and medicaments.

It would not be difficult to classify the common methods of food preparation in this country, by separating them into four

distinct categories. In the order of their demerit they may be illustrated by the following types:

The lowest and most abominable can be best studied in the poorest class of western hotels and in the cheaper lodging houses both of the city and country. It would be difficult to say whether ignorance, greed, moral depravity, or an inherited failure to beget repugnance to filth, lies at the root of its enormity. The food here is always placed before the eater without apology for an attempt to make it seem attractive to the eye. Of its effect upon the palate, perhaps, the less said the better. It is cooked in the crudest of methods by ill-paid and ignorant persons of either sex. With respect to its quality, before it has been subjected to any culinary process, the philosopher would look upon it as one of the amazing and incongruous puzzles presented to his observation in this land of fertile fields, grazing herds, abundant markets, and cheap railway transportation. Disjected fragments of ill-favored meat, fried and swimming in an indigestible semi-liquid grease; solid wedges of sour corn meal; livid disks, compounded of buckwheat flour and water; articles such as these are daily set on tables before commercial travelers and day laborers in many parts of this country.* It is after his stomach is filled with such food as this that the victim turns with relish and an instinctive need for the promotion of digestion, to a glass of spirits or to the cheapest grades of tobacco for use in either his pipe or his mouth. The bar-room

* I cannot resist the temptation to compare the condition of the food placed before the middle class of our people in many parts of this country, in this, the evening of the Nineteenth Century, with the condition of our English ancestors over five hundred years ago. In the year 1336 the Parliament of Edward III., in consequence of the excesses and expenses of the tables of not only the great but also of the "lesser people" in the realm, enacted a law that "no man, of what estate or condition soever he be, shall cause himself to be served, in his own house or elsewhere, at dinner, meal, or supper, or at any time, with more than two courses, and each mess of two sorts of victuals at the utmost, be it of flesh or fish, with the common sorts of pottage, without sauce or any other sorts of victuals. And, if any man choose to have sauce for his mess he may, provided it be not made at great cost; and if fish or flesh to be mixed therein, it shall be of two sorts only at the utmost, either fish or flesh, and shall stand instead of a mess," etc. 10 Ed. III., Cap. 3. Harrison, writing of the English people but a few years later in the same century, describes the "great shins of beef" eaten by the "comyn people" with "mutton veal, lamb, pork, whereof one findeth great store in the markets adjoining; besides souse, brawn, bacon, fruit, pies of fruit, fowls of sundry sorts," etc., in consequence of which they did "fare commonly so well as the king."

If any reader of these lines concludes that I am laying too much stress on this point, I pray him to read this description and then to put up at the first country hotel he finds one hundred miles beyond any town having fifty thousand inhabitants, in one of the Northwestern States.

and the shop of the tobocconist are far wiser than to display their wares in the unattractive and even disgusting setting of the cheap lodging-houses. The inmates of the latter will often admit that they seat themselves at the dining table chiefly in order to secure a distention of the stomach sufficient to make acceptable the stimulants that are to follow.

The second of the methods referred to above, is exemplified in the better class of boarding houses, and the second-rate city and country hotels. In these the food is usually prepared by female servants, often ignorant themselves but acting under the instructions of a mistress or head cook. The meals are served with a decent regard for cleanliness; fried abominations are seldom seen; there is a fair variety of roast meats; fish is cooked after a fashion, and some delicacies appear upon the table. But there are grave errors at every meal. The table companions are seated closely together; their time is limited; conversation is subordinated to the gratification of appetite; the meal is hurried; and the great American pie, manufactured by wholesale, is always patronized. Iced-water is drunk in large draughts by the eager and hurried feeders. The bread is invariably poor. A dish of properly cooked vegetables is among the greatest of rarities; and the potato, which judiciously treated in its jacket is one of the precious luxuries among the poorest of trans-Atlantic nations, is transformed into a water-logged and altogether wretched travesty of its better self.*

* "If there is any truth in the proverb, 'Tell me what you eat, and I will tell you what you are,' it is amply illustrated in the new world. The American does not eat, he simply fills himself; his sole desire is to satisfy hunger, and, if he can secure quantity, quality is of little importance; hence one frequently sees him ingest a lot of food standing up, or scarcely seated, at a counter. There are fixed hours between which meals may be had, and food must be taken at those times, whether one may be hungry or not. A despotic, all-powerful public opinion, which no one dares defy, decrees the hours for eating. The meals are always begun with a square block of rancid butter, having an odor of margarine. A pause of fifteen to twenty minutes gives time to attempt the digestion of this compound, and then you find yourself surrounded by a variety of little dishes which you expressed an intention to eat. It matters not that they become cold, for do you not see around you 'des misses, des ladies, des gentlemen's,' eating watermelon with chicken, and currant jelly with cutlets and salad! Behind your chair is one negro who fans you, and another who puts ice in your glass. Americans have a number of religions, and but one sauce; that is like glue, by which otherwise good meats are ruined. Their eggs have a queer, stale animal flavor, which is supposed to result from the hens being fed upon meat that they may lay more. Corn is a favorite article of food, and, though eaten in various ways, is most often boiled on the cob. Three or four of these cylinders are not too much for a lover of this cereal, who will gnaw off the grains with his teeth, and presently leave nothing but 'la carcasse.'"—(M. Poncet), *The Medical Record* Dec. 1, 1883.

Of the third type little need be said. It is well shown and quite too well paid for at such places as Delmonico's in the city of New York. The high prices which it commands, may be counted in some sense as a measure of the greatness of the demand for, and the paucity of the supply of such elegance. Beyond the reach of all save a wealthy few, the expensive and attractive adaptation of the skill of the French cuisine to American needs, may be made to contain the elements of relief for certain forms of dyspepsia and constipation.

But, lastly, the highest type of excellence for the table of the native American should be found in his own home. Here he has the opportunity of so directing his household that the health of all its members may be subserved by the ingestion of properly selected and suitably cooked articles of food. Of the grievous errors here committed, in ignorance, in recklessness, or in haste, space would fail to tell. If here are the triumphs, here are also the failures, which the wise physician has occasion to regret. At its worst, however, there is this in its favor,—the table is set in the midst of a home; the mistress herself purchases at the market rates and does not pay another to do it for her ; she can, in an emergency, correct the blunders of a worthless cook, and even avert the fate of an omelet doomed to destruction in less skillful hands. The wholesome habit of preparing food for one's self is much better understood abroad than in this country. Every undergraduate of an English University can brew a cup of tea for himself in his own apartment, and, with the same limited accommodations, extemporize for his friends a modest but appetizing repast. Every Frenchman understands the mystery of the *pot-au-feu*, and can infuse coffee in a way that will bring the water to the mouth of him whose nostrils are reached by its aroma. Has any reader of these lines by this time concluded that I have drifted far from the subject to which it was promised that these pages should be devoted? If there be such, let me assure him that I am right in the heart of my theme. A common experience may be cited as the best proof:

Take, for example, the man who complains of being " bilious." The symptoms which, if he be intelligent, he will describe in detail, such as vague pains, anorexia, and even distaste for food,

mental hebetude, constipation,—these we may be sure are all real, and not the offspring of any hypochondriasis. The usual remedy for such a condition is a blue pill or some other dose of cathartic medicine. This will usually ensure relief within forty-eight hours, an interval which in many cases, however, will be passed with a very considerable degree of discomfort.

But the curious alchemy of nature laughs at the clumsy methods of art! This man, with a stomach distended with gas and an unladen colon, is unexpectedly invited to dine with some friends. He concludes to defer his pill and to accept his invitation. Once at table, his several senses are gratefully stimulated by enticing odors that exhale from appetizing dishes spread upon a luxurious board. He is too wise to abuse his privilege as a guest. He eats, he drinks, he smiles, he converses, and at last he laughs! His stomach, that aforetime refused its gracious offices, now gladly consents to do its part. Word is speedily sent along the line that work is to be resumed, and all the agents of digestion bestir themselves. Pent up bile seeks the duodenum; the pancreas participates in the general activity; the solitary and agminated glands below answer to the call from above. On the next morning, the guest, to his astonishment, enjoys an ample movement of the bowels; escapes from the bondage of yesterday's distress, and even acknowledges a keen desire for another meal. Here is a charm, whose magic no pill, no draught, no dose of salts can rival. We all know how this is, but we do not all learn and remember its lesson. To secure the highest digestive effects, the food taken into the stomach must be of wholesome quality, acceptably cooked, and tastefully served. There is a moral side, even, to a constipated bowel.

The vexed and mixed question of the influence of fluid ingesta upon the health has been almost hopelessly confused in this country by well meaning but often misguided people in a controversy spreading over questions of morals, religion, temperance, prohibition, total abstinence, and who can say what beside! *

* "I am against dealing with a question of this nature (the liquor question), affecting the interests of so many people, by what you may call a hurricane. That is fit only for times of revolution. I should like to deal with it in a more just and what I call more statesmanlike manner, according to the legislation that becomes an intelligent people in a tranquil time."—*Hon. John Bright.*

"It would be impossible for any set of men to manifest greater bigotry and intolerance

It was, I believe, Lord Macaulay who first declared that the soldiers of an army acquiring by conquest a wine-producing country, always began with the grossest intemperance, and always concluded by the most moderate indulgence in the use of wine, and that drunkenness was least common among the inhabitants of grape-producing districts. However disputed his position, it is certain that education has much to do with sentiment on the subject of the use of wine, spirits, and beer. There are very few clergymen of any church in Europe, who would like to be seen drinking spirits, but there are far fewer who do not regularly and habitually make use of wine or beer. At a *fête champètre* given the members of the National Evangelical Alliance at Basle, in the year 1879, it was reported in the public press that "beer and wine flowed like water"; yet, fully seventy-five per cent. of those who were present were clerical delegates and their wives.

The wise physician will always be a citizen of the world and refuse to share the prejudices of place or season. No one better than he can tell the tale of wretchedness, poverty, disease, and shame, that may be charged to the account of intemperance in drink. It is he who visits those moral and physical wrecks, which in every community serve as dismal warnings of the stress of temptation, and of the shoals where so many victims are stranded. He has watched, too, long before the miserable end, the repeated failures to escape once more upon a smoother sea. If he has not dropped a plummet into those depths wherein have fallen husband, wife, and children, he has had but an imperfect experience of the community in which he essays the practice of his profession.

But he is also well aware of the fact that honest lives, healthful lives, and sweet lives, are consistent with the habitual use of wine and beer. He will counsel no man to make use of these in the absence of sufficient reason; but he will frown on no man

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toward all who have seen fit to differ from them on moral and religious measures, than have characterized those zealous and thoroughly well meaning reformers who, through various organizations, have assumed the custody of this (temperance) question. Editors who have undertaken to discuss the question independently—as they are in the habit of discussing all public questions—have been snubbed and maligned until they have dropped it in disgust, and turned the whole matter over to those who have doubted or denounced them."—*Dr. Holland.*

who, being in the possession of good health, may choose to use them in prudent moderation.

What good the temperance reformers have wrought in this country, has been unmistakably mixed with one broad evil. They have made the temperate use of wine and the lighter malt liquors so disreputable in the eyes of the many, that the practice has been driven from more respectable surroundings to the bar-room, the saloon, or the dining room closet. In what American boarding-house can a man or a woman regularly open with each dinner a bottle of Bordeaux or Burgundy, without at once becoming the subject of a merciless social ostracism? How many gentlemen can indulge in a glass of champagne in the company of ladies in any public resort, without awaking the suspicion of all beholders with respect to the character of each member of the entire party? This is more than intolerable. There is a flavor about it of actual indecency. It is a part of that ostracism which has driven every man who is in need of even a glass of sherry to the malodorous precincts of an American bar. With reference to the whole matter, it may be truthfully said that, all practices connected with eating and drinking that cannot be generally approved and adopted in the company of gentlewomen and well bred men, are social evils that will in the end become social vices. When there shall be in this country a healthy sentiment that approves and encourages the temperate

* "Wine-drinking populations have keener, livelier wits than those who use other beverages. It is proved by long experience that the pure juice of the grape sustains the force of activity of the brain. The poets who, from age to age, have sung the praise of wine, were not wholly either deceivers or deceived. In the lands of the vine, where the plant is looked upon as a nursing-mother, men do not injure their health by drinking, but in the colder North where the grape can never ripen, the deaths from intemperance are frequent Bread and wine are almost pure gift of Nature, though both are prepared by man after the old traditional ways. These are not poisons, but gin and absinthe are poisons, madness poured out from a bottle! Kant and Goethe loved the pure Rhine wine, and their brains were clear and vigorous to the utmost span of life. It was not wine that ruined Burns and Byron, or Baudelaire, or Alfred de Musset.

That honest Northern drink — beer, deserves our friendly recognition. It has quite a peculiar effect upon the nervous system, giving a rest and calm which no other drink can procure for it so safely. It is said that beer drinkers are slow, and a little heavy; that they have an ox-like placidity not quite favorable to any brilliant intellectual display. But there are times when this placidity is what the laboring brain most needs. After the agitations of too active thinking there is safety in a tankard of ale. Wine-drinkers are agile, but they are excitable; beer-drinkers are heavy, but in their heaviness there is peace. In that clear, golden drink which England has brewed for more than a thousand Octobers, and will brew for a thousand more, we may find, perhaps, some explanation of that absence of irritibility which is the safe-guard of the national character, which makes it faithful in its affections, easy to govern, not easy to excite to violence."—(*Philip Gilbert Hamerton*)

use of wines and malt liquors in public, in the presence of women and children, and in the view of all the world, there will be more genuine courtesy in our manners and much less hypocrisy in our characters.

The important bearing of this question upon the digestive tract can scarcely be disputed. Every Frenchman looks with some justification upon his *vin de pays* as the great aid and promoter of his digestion. When in bed, prostrated by an illness producing inability to assimilate food, the first article he craves is his *eau trempée*, toast moistened in a weak mixture of wine and water. It is a marvelous thing to watch him when he is in his usual health and at dinner. Slowly, very slowly, he sips his glass of Bordeaux, mixing it well with the food, which he takes in small morsels, into his mouth, all well and thoroughly masticated before entering the œsophagus. No iced water for him, if you please! He would not chill his stomach with such an Arctic libation for all the treasures of the Louvre. He who has not seen and noted the leisurely performance of a French gentleman at his dining table, has never mastered the rudiments of gastronomy, and has yet to learn the alphabet of assimilation.

Perhaps the reverse of the picture may be well studied for a moment. Our American understands perfectly the method by which he proposes to satisfy his physical cravings. He desires a given effect, and that with as little trouble and delay as possible. Wine and malt liquors are for him quite too slow in their operation; and, besides, 'let them say what they will, a native Kentucky whiskey is more suited to his taste than any wine made.' When he wishes it at all, he wishes it served promptly, for example, in that brief respite when the Stock Board has ceased to resound with its scarcely less stimulating yells. He wants it strong; he wants it speedy; he wants it "straight." Even the spirit-drinking Englishman does better than this, for he satisfies himself by pouring a small quantity of brandy into a large quantity of water, which he drinks only in this state of large dilution. The American cannot afford to outrage public opinion since he may be a candidate for Congress in a few months. Stranger things have happened! Accordingly he slily slips around a corner or into an alley, where he calls for

his glass. Once in his hand he literally pours the fiery stuff down his throat. If there happens to be no special haste, he repeats the dose in the company of his friends. Small wonder that this man's digestive tract is soon in that condition when all the pepsine of all the swine in the corn fields of Kansas cannot work the miracle of its cure. And yet this poor, ignorant fool, the woes of whose digestive canal we have all studied, from his shrunken liver to his bloated mesentery, is held up to the world as a fair sample of that gracious company which includes the wisest, bravest and kingliest of mankind in all ages since the first cultivation of the vine! It includes such men as Horace, Constantine, Virgil and Cicero, among the ancient Romans; such men as Coleridge, Wellington, Milton, and the lion-hearted Richard, of England; the illustrious line of the philosophers and savants of France from the day of Charlemagne to that of the great Napoleon; the splendid names which the German empire has lately given to the world, whose superb acme is Prince Bismark himself; and even the reformer Martin Luther, whose four hundredth birthday was celebrated but a few weeks ago. I dismiss this part of my subject with the apophthegm, that while the weaker alcoholic beverages can undoubtedly be so used as in the highest degree to promote assimilation and digestion, not one American in a hundred has the slightest conception of how this is to be done.

With regard to the consumption of drugs by those who seek to be in this way relieved of constipation and its attendant ills, it is to be remarked that they who adopt such a practice usually suffer before the end is attained. The consumption of rhubarb is possibly less common now than in the days of our grandfathers, when the chewing of the root, both in public and in private, was the solace of many unoccupied moments. The unfortunate tendency of the people of our country to believe in the assurances of the vendor or proprietor of patent medicines, has deluged the country with every form and variety of cathartic pills and purgative medicine. As to the constituents of their nauseous compounds, it may be well said in the language of one of the oldest as well as one of the wisest pharmacists in the United States: "There is money in them all and nothing else." These are properly

considered among the causes of constipation. The deleterious influence they exert on the alimentary canal by their drastic, stimulating, or cathartic effects, is due, not merely to the unfortunate ease with which the dose may be procured of any druggist and swallowed as often as the slightest whim or uneasy sensation may dictate. It is based also on the fact that since there is no limit to what the manufacturer may choose to put into his compounds save that set up by his own conscience, there is a constant and almost irresistible temptation for him to substitute coarser or more drastic drugs, such as caballine aloes, Glauber's salts, croton oil, etc., for the better articles which at the first aided in gaining a reputation for his nostrum. "Aided," I say, for there can be no question but that a sum of money judiciously expended in widely advertising a solution of brown sugar in water, for any purpose whatever under the sun, will pay handsomely for the investment just so long as there are more fools than wise to read and believe in advertisements.

If this can be said of cathartic remedies that are advertised to relieve constipation, what words can do justice to the disastrous habits into which have fallen so many otherwise sensible persons of taking drugs for the purpose of gaining other effects, but who in the end accomplish this unexpected and unwelcome result. Such are they who have accustomed themselves to taking a few grains of chloral or the bromide of potassium on retiring to bed "for the sake of securing a night's rest." Others have been swallowing all sorts of compounds for the purpose of "cleansing the blood." Here, for example, is an extract of "clover blossoms." What an innocent name! Who could refuse to taste of that from which the honey-bee has gathered its luscious store! Yet, curiously enough, it is they who have been making use of the so-called "vegetable purifiers of the blood," who display eruptions upon the skin not to be distinguished from those produced by the iodide of potassium. Some of the "sarsaparilla" and other proprietary articles are known to contain still more harmful ingredients. It is one of the inscrutable paradoxes to be recognized in human nature, that some of the greatest cruelties it has ever practised have been committed in the name of religion; and that a man will actually pay a physician for telling him how

to be rid of an ailment which he is at the same time daily engendering or aggravating by an act of his own folly and at an expense to his pocket.

Lastly, the immoderate use of tobacco, though not properly included in the list of ingesta, may be named among the common causes of the ailment under consideration. The subject is one that will, probably for a long time to come, be the occasion of a controversy in which the belligerents on either side display as much zeal untempered with discretion as in the warfare upon alcohol. But here also the wise physician will attempt to take a sound position, without exposing himself to the serious charge of prejudice. The consumption of tobacco has steadily and regularly increased in all countries since the date of the discovery of the uses to which it may be put; and it is safe to predict that it will always be prized by the human family. Revolutions, it is said, never go backward. The "divine weed," as Spenser first named it, a solace for the dispirited and a support for the weary the world over, first grasped in the needy hands of the contemporaries of Sir Walter Raleigh, will never be relinquished by their descendents while toilers can rest and the care-worn gather comfort for the morrow from its grateful incense. To-day, no less than when the words were first set down by Kingsley, is it recognized as: "A lone man's companion, a bachelor's friend, a hungry man's food, a sad man's cordial, a wakeful man's sleep, and a chilly man's fire; there is no herb like it under the under the canopy of heaven."

But Americans are nothing if not extremists, and, therefore, he who refuses to raise his voice against the damage inflicted by their excessive and extravagant use of tobacco, is not discharging his full duty as a physician. Of its injurious effects upon the young we need not here speak at length, since these do not form the class which chiefly suffers from constipation and its attendant ills. Gorgas, in his late report* upon an experiment made on a sufficiently large scale in depriving of tobacco the cadets of the

* Report of the Secretary of the Navy, being part of the Message and Documents communicated to the two Houses of Congress at the beginning of the Second Session, 47th Congress, Washington, 1882. Report of the Surgeon-General of the Navy, page 612. Report of Medical Inspector, A. C. Gorgas.

United States Naval Academy, well demonstrates the physical improvement which such abstinence can work in the case of maturing youths. Drawings made by the same person when completely free from the influence of tobacco, and also after excessive smoking, showed by comparison differences which even the least expert could recognize at at glance. It is somewhat remarkable that aside from the tremor and muscular weakness betrayed in the drawing made by the smoker, one could also recognize a subtler effect produced upon the brain and the eye of the artist as a result of which he either did not understand or failed to perceive the direction of certain lines and the form of certain objects.*

No experienced practitioner needs to be told again of the failure of co-ordination of muscular movements resulting from the injudicious nse of tobacco; or of the "tobacco-heart," first well described by Mitchell, and since recognized in enormous proportion among soldiers, sailors, car-drivers, prison criminals and others of like class, who throughout the entire day can gratify the continual temptation to keep the mouth filled with chewing tobacco of the cheapest grades.

But, to refer more explicitly to the subject in hand, what shall we do with a fact first announced by a no less keen observer than Trousseau, that an after-breakfast cigar will often ensure for the smoker, and that quite promptly, a satisfactory stool? This is a perfectly true statement, and there are thousands who have verified its accuracy. It is also true, in the case of many persons who suffer from torpor of the digestive tract, that the habit of smoking a post-prandial cigar serves to promote peristalsis, to stimulate secretion, and thus to improve the performance of many functions essential to the best nutrition of the body. These admitted facts, however, do not stand in contradiction with the general laws whose violation by intemperance results in harm. For one who is sufficiently interested to investigate this matter,

* It is scarcely necessary for a man of ordinary observation to be told that the practice of smoking tobacco is consistent with the highest intellectual attainments. For example, a late sketch of the famous poet-laureate of England, Alfred Tennyson, from the pen of Mrs. Ritchie, gives us a picture of the greatest author of English verse, "smoking in a top room in Eaton Square some Durham Tobacco which Lowell had given him."

The regular breakfast, in all seasons of the year, of the profound thinker, Kant, was a cup of tea and a pipe of tobacco.

it is astounding to count up the number of men who smoke six, twelve, and even more cigars, or a package or two of cigarettes daily; men who, when not engaged in eating and drinking, are teased by nerves that quiver for their accustomed narcotico-stimulant five minutes after its withdrawal; men who smoke in the morning before breakfast and at night before getting into bed, it matters not whether the stomach be full or empty; men who practically never escape from an atmosphere charged with the products of tobacco-combustion; whose food and drink cannot but be more or less contaminated from the same source. For these, and for those, too, whose hygienic errors are far fewer than theirs, an habitual torpor of the liver and of the secreting glands of the intestine unquestionably results, accompanied or not by the cardiac and cerebro-spinal symptoms to which I have referred.

A simple rule can be applied to tobacco-usage, whose scope will properly include a long list of luxuries. The man of mature years who uses tobacco in moderation as a luxury only, or as an occasional means of promoting digestion, or as an often effective measure for preventing the accumulation of superfluous flesh, or for other purposes unconnected with the continual yielding to the solicitation of his nerves, should generally be indulged in the privilege. But he who has become the slave of an uncontrollable appetite for tobacco, must be encouraged, scolded, commanded, and aided, in the effort to escape from his bonds. There is peril to his health in every week of delay, and the great army of tobacco users for the best part of a century will confirm the truth of the warning.

If one will comprehensively and without any prejudice, review for himself the entire field which in these pages has been briefly visited at a few points, he can thus form some idea of the picture presented by the people of this country to foreigners, who look upon us with critical intelligence and a not unfriendly eye. To them, we for a brief moment or two, expose those features which we look upon in each other for a lifetime. Our vision, dulled by uniformity of impression and absence of just comparison, accepts with incredulity the testimony of other eyes. Before the world, we parade our juiceless men; our slender and too

graceful women; our cheeks, equally lank whether they compress a quid or make a vacuum for the draft of a cigar; our sallow skins, sympathizing with an inactive liver and an undistended spleen; our nervous systems, equally ready for original invention and for the development of new types of nervous diseases; and we wonder that such visitors to us as Mr. Herbert Spencer and some other of his distinguished countrymen, can speak of us as they do.

The whole subject is well illustrated by an incident which occurred last summer. An excellent representative of native born Americans, the direct descendant of a line of men who for two hundred years have digested the food grown upon this soil, a fair type of our race in his social position, wealth, intellectual acquirements, and . . . . . poor physique, being in London, consulted an eminent British practitioner about his health. "Doctor," said he, "I believe that I am bilious, and need some medicine to get rid of my bile." "Why, bless your soul," cried the burly representative of our profession, as he gazed at the sallow features and thin cheeks of our eminent American, "the very thing you need is a larger quantity of really good bile!"

My subject has already enticed me into a far wider digression than I anticipated at the outset. If I have, in the preceding pages, correctly set forth the truth, there should be but little left to be said respecting the therapy of the disorder under discussion. He who has recognized the cause, is in the best position to relieve the condition. It will be proper, however, to conclude with a hasty review of the measures which may be employed for the relief of habitual constipation and its results, to the exclusion of medicaments.

First, then, sufferers of this class need more systematic bodily exercise. Too many persons of both sexes, living in our large cities, make use of the street railway cars. Many a merchant, and many of his subordinates too, seated or engaged throughout the day in sedentary employment, would be far better both in health and in pocket for the walk, morning and night, over the few miles which separate their lodging-houses from their places of business. Women, more particularly, should make a practice of walking a given number of miles every day, attempting at

first short distances only, and gradually pushing their excursions out toward the suburban towns and the open country. For those unable to spend the time demanded by these excursions, the gymnasia are open to both sexes; as also are the swimming baths and the riding schools. Many young women have been safely piloted by our wise gynæcologists through a perilous puberty to the richness and fullness of healthy womanhood, after a resort to equestrianism. To be able to ride well, is one of the most graceful, invigorating, and delightful of accomplishments for woman; and scarcely less can be said of a long list of outdoor recreations, including swimming, skating, lawn tennis, croquet, etc.

A large number of men, too, who are daily trundled about in their phaetons and coupés, would be much better if they were made to mount one of their own horses. Fortunately, horsemanship in this country is every year gaining in popularity with both sexes, since its possibilities have been both created and enlarged by the construction of public parks set aside for recreation, within or near many of our large towns.

Unfortunately, equestrianism, both in the riding schools and with the resources of a private stable, is a more or less expensive luxury quite beyond the reach of many. The same may be said, though to a less degree, of the invaluable aid rendered by the gymnasia, which also are often inaccessible by reason of distance, or are so crowded at certain hours of preference, as to be undesirable for the purpose in view.

The domestic apparatus, however, adapted for use in one's home, is within reach of many, and can be made to accomplish a great good. Still, the Indian clubs and dumb-bells are simpler and less expensive. *With a single dumb-bell*, that may be purchased in any city at an outlay of but a few shillings, *every muscle in the body may be exercised, strengthened*, and *actually made to increase in size*. As the proper method of employing this useful instrument is not very generally understood, I propose to give specific directions as to the manner of using it so as to secure the best results.

One, or a pair, of dumb-bells may be used, the weight of which may be determined by the number to be employed in exercise, and the strength and years of the individual for whom

they are intended. It is better to begin with a small weight and a single dumb-bell, till the muscles of the body are somewhat habituated to its management. An adult male can advance to the regular use of a dumb-bell weighing thirty pounds; while women generally should not begin with one of more than ten pounds weight. One should exercise only on an empty stomach, in a well-aired and cool apartment, with a single loose covering for the upper part of the body, such as a woolen under-garment. The iron handle of the dumb-bell should be covered with soft leather in order to protect the palms.

Standing at ease in an erect posture, with the feet slightly separated and the dumb-bell lying between them, the body is strongly flexed by the sheer force of the muscles of the trunk and the lower limbs, while the arms depend loosely at the side. When one hand is within reach of the dumb-bell, the latter is grasped and merely held firmly while, by the aid of the muscles of the trunk and lower limbs, the body is brought to the erect position again, the hand which holds the dumb-bell being thus carried to the side, its arm in full extension. Care should be had not to assist this movement by resting the free hand upon any part of the person, such as the knee of its side. Then slowly, and without taking advantage of the momentum which might be acquired by a jerk, the arm supporting the dumb-bell is brought into a state of extreme flexion, till the forearm is nearly parallel with the arm, and the hand which grasps the dumb-bell is turned upward. By the same slow process, and by the assistance of the deltoid and scapular muscles, the dumb-bell is elevated above the head to the extent of the full reach of the arm. It is lowered to the ground as slowly as it was raised, each of the movements described above being performed in reverse order, the whole by the sheer force of muscular energy, in opposition to the gravity of the dumb-bell. Special care should be taken as before, not to find support for the free arm on the knee, thigh, hip, or flank of its side of the body. When the dumb–bell again rests on the floor, a similar series of movements is practiced by the other hand and arm, the body bending as before, forward and downward, to reach the dumb-bell, upward to the erect position as the weight is carried to the side, forward and downward again as the

weight is again brought to the ground. In this way all the muscles of the body are gradually and systematically brought into play, in a gentle exercise which does not share the violence required by the more sudden demands made, for example, in leaping, lifting, or the exercises of the trapeze. By raising in this way six thousand pounds to a height of nearly six feet in about one hour, a man of average height, weight, and strength, can, in a temperature of 60° F., induce an agreeable perspiration, and a thrill of activity in every part of his frame, which will, if the exercise be repeated regularly day after day, add very greatly to the weight and vigor of every part of his body. It is of course understood that this is merely suggested as a substitute for the invigorating exercises of out-door life, both in the form of labor and amusement, from which so many residents of towns and cities are perforce restricted.

No less systematic should be the practice of massage of the abdomen, should such be required. For this purpose the body should rest in a reclining position, in order to relax the abdominal muscles. The operation should not be performed fitfully or hastily. A given hour each day, preferably in the evening before seeking rest, should be sacredly devoted to the purpose. Its limits should on each occasion be fixed by a time-piece. The entire abdominal surface should then be regularly kneaded; not rubbed, but impressed with a series of alternate strokes of the hands at first upward in the direction of the colon, then from right to left, and afterward downward, the whole to be concluded with a series of compressive movements in which the abdomen is grasped by the two hands and gently swayed in a twisting or rocking motion from side to side. If one can here have the aid of an accomplished masseur, or masseuse, the end is, without doubt, more perfectly attained; but in their absence, they who really need such service should be urged to practice the operation regularly and systematically upon themselves. In thousands of cases have patients, under the direction of a competent physician, received marvelous benefits by the aid of their own hands in rubbing, kneading, and othewise manipulating various parts of their own bodies.

With respect to the selection of foods which are most suitable

and least objectionable in each case, it should be remembered that errors are committed in widely divergent directions. The so-called "health-foods," such as oat-meal, cracked wheat, etc., are, without question, useful in certain cases, but when the victim of dyspepsia or habitual constipation has once determined to support existence chiefly upon this dismal sort of diet, he will surely be worse before he is better. These articles are often positively irritating to the mucous lining of the digestive canal, which, by reason of a condition of torpidity, of anæmia, or of muscular weakness, is often totally unequal to the task of converting, for example, a bowlful of "wheaten grits" into protoplasm. It should never be forgotten that man requires a mixed diet; that to digest his food well it must be made attractive to his palate, and that it is always better assimilated when it is set before him in a state which is attractive to the eye. No hard and fast lines can here be drawn. Too many persons, living in the shadow of fear less they commit dietary mistakes, or in consequence of a languid disinclination for food resulting from their sedentary habits, eat an insufficient amount of food. This is particularly true of women who lead indolent lives. They rise in the morning—for breakfast, swallow a cup of coffee and a delicate slice of buttered toast; they have no appetite for more than this. At luncheon, or at supper, they take a cup of tea, with toast or bread, and a thin slice of cold fowl or warmed beef, to which possibly a fragment of cake or a small quantity of "sweets" is added. At dinner, they partake very sparingly of meat with potato, or some other vegetable, and some trifle for dessert.

Now, this is a diet-list almost of the character which might be recommended to a patient affected with looseness of the bowels; the tea and toast or bread, which constitute so large a part of the dietary of too many women, being admirably adapted to beget and sustain a condition of habitual constipation. Persons accustomed to this wretchedly meager supply of food, need, first, an amount of exercise sufficient to cause a demand for more aliment; and, second, a larger quantity of the latter, in proportions adapted to the manifold characters of the appetite and the increasing digestive capacity. In proportion as the bowel is distended with a digestible mass of chyme, elaborated from a judiciously com-

mingled animal and vegetable food, will it be able to recognize its natural and healthy stimulus to contraction, and to actively obey it.

The laxative effect of fruit is pretty generally recognized by the laity, but when asked whether they are using fruit for the purpose of securing relief from habitual constipation, they will often respond that this is the case, when the actual consumption of the same is quite insufficient for the purpose in view. A small quantity of fruit, consumed after a dinner of meats, is not enough to secure a laxative effect in the really constipated. The improved railway communication of this country has brought the fruit markets of the tropic and temperate zones into such proximity, that now there is scarcely a day in the year when the resident of the larger towns can not at very moderate rates supply himself with excellent fruit of wholesome quality. This should be regularly purchased and systematically eaten by the persons who are in greatest need of it, and at the hours when the stomach is empty. Thus, the fig, the orange, the apple, may be employed on rising in the morning, almost exclusively for the luncheon at noon, and often, by those who like them, even at night before going to rest, popular prejudice to the contrary notwithstanding. The chief point to be noted in this connection is, not that fruit has this effect, which many very ignorant people understand quite well, but that persons requiring a diet of fruit sufficient to move the bowels need to be encouraged by their physicians to systematically frequent the fruit markets, to purchase for themselves the best and freshest fruits to be had, not for the table exclusively, but for their individual purposes, in the bed room or the dressing-room, and that such purchases should be intelligently and systematically devoted to securing the best results.

In this connection it is scarcely necessary to add, that a glass or more of pure water, swallowed on an empty stomach before breakfast, or at night before seeking the bed, or on both occasions, is often in itself sufficient to secure a satisfactory motion. It is a common prejudice that water drinking, even among those who pride themselves upon temperance in alcoholic stimulants, is an evil practice. It is difficult to understand how this strange infatuation originated. The instinct for pure water is acknowl-

edged by all the vertebrates; and the largest consumers of it are often the longest lived and best nourished. The Arab of the desert points with pride and admiration to his fleet Arabian courser dipping his muzzle into the stream to the level of his eyes as he drinks, and claims that in this way his horse proves the excellence of his breeding. Certainly many persons of no pretensions to scientific acquirements have again and again remarked that those who consume a large quantity of water with their meals are usually better nourished and more free from digestive troubles than are others. Perhaps it is the loading of the stomach with hurtful and even dangerous draughts of iced or unduly cooled water that has given rise to the prejudice. Whatever may have been its origin, it should be relegated to the old women and the occupants of the nursery, as unworthy of other company. Those suffering from indigestion and constipation are always better for drinking freely of pure water at a temperature sufficiently cool to be merely acceptable to the palate. It is of course presumed that this fluid is potable. That which is suspected should be always filtered; and the better filters are cheaper in the end, than the purchase of the various spring waters, which, however excellent in their purity, have to be brought from a distance in casks lined with paraffine, and to be thus sold at rates prohibiting their largest employment.

Among the residents of regions in the West where the "hard" and lime waters are chiefly used for purposes of the table and the kitchen, there is a source of relief for the constipated which is quite too often overlooked. I refer to the use of rain water for drinking and cooking purposes. The erection of carefully constructed cisterns is the chief need of many of the smaller towns in the West; for the use of rain water, when it is cleansed of impurities by filtering, will often solve the entire question, the persons using it having no further need of cathartics of any description.

The consideration of this important subject would be quite imperfect, if no reference were had to the need of regularity in the time of evacuating the bowels. Upon this point, as upon others to which there has been occasion to refer, women are sinners above others. With men, the pressure of business demands and

the limitation of time have in many cases begotten and enforced attention to this great requisite. The hour after breakfast, or some other meal, is set aside for the daily evacuation of the bowels. There is with many men a sense of discomfort when the needed relief is not thus had, and often a corresponding precaution as to the morrow.

Unfortunately, to many women the associations of the temple of Cloacina and the oblations required by that goddess are, foolishly enough, extremely repugnant. They defer to an emergency, or to an imperative call, the duty of regularly evacuating the rectum, many of them hastily visiting the closet, merely to leave there the fæces immediately impinging upon the inner sphincter of the bowel. It is, of course, needless to say here that a reform in such matters is absolutely indispensable to a correction of the constipated condition.

As an illustration of the advantage which plain speaking and common sense possess over all sorts of false modesty and pseudo-"refinement," I am tempted to refer to a well known incident in the life of one of the most scholarly and accomplished physicians of this country, who not long since passed to his long rest with the respect and esteem of all his peers. He was about to accompany a large party of gentlemen and ladies on an extended tour through Europe, and before going on board of the steamer he collected the latter in one of the reception rooms of a hotel in New York, and thus addressed them: "We are about," he said, "to make a long journey together, as you all well know, and it becomes me, not as the physician of the party, for we need none such, but as a physician, to give you a word of advice and warning as to my course. I wish to see you all return to this country in just as good health as you are at this moment, even better; and in the meantime to be able to enjoy foreign travel without the vexatious and disappointing delays incidental to temporary attacks of illness on the part of any one, which might thus interfere with the plans and the pleasure of the entire party. With this end in view, I desire to declare in the most positive manner, that I shall refuse to start with the party on a day's journey until every member of it has had a satisfactory movement of the bowels. As your sex is most negligent of this important duty, I shall enforce

the rule particularly with you." The interesting point of the anecdote is that all the travelers returned to the city of New York in sound health, no one of them during a year's absence having been ill a single day.

The need of regularly attending to the movement of the bowels is misinterpreted by some. They deem this need to rest upon the danger of merely forgetting the hour set apart for this necessary duty. But this is the most imperfect view of the case. The need is really based upon, first, the possibility of attaining high results by training the body; second, the law that regularity of departure, with uninterrupted transmission, involves regularity of arrival.

Few realize the degree to which human bodies are in process of daily training; and fewer yet the excellence to which such training can be brought. As regards the voluntary muscles, a good violin or piano-player furnishes an excellent illustration of their perfect training. As to the involuntary muscles, or even those which, being voluntary, are involuntarily employed, it is scarcely necessary to remind medical men that individuals have been found who could shift the position of the heart, dilate the pupil, regurgitate food from the stomach, and even empty the uterus at will. Exceptional as these facts must necessarily be, they are yet in a high degree instructive. I was recently shown, in a tack factory, a workman apparently asleep, seated before a machine which was engaged in chewing a slip of metal into myriads of tacks. It was his duty to present first one side, then the other, of the metallic strip, to the insatiable jaws of the iron monster in his presence, the motion being alternated, I should say, about once every two seconds. Long practice had so accustomed him to this work that, even in sleep, his voluntary muscles performed this delicate task when he was quite unconscious of their movement. Even a puppy but a few weeks old, then little more than a mass of animated protoplasm, has been taught to perform tricks.

Now, a man's or a woman's bowel can be taught better tricks than these by any one who determines upon it. It is a gross mistake to look upon this sentient and complex organ as though it were nothing more than a metallic waste pipe. He who accus-

toms his bowel to moving after the morning meal. or at another selected hour, trains every muscle connected with the expulsive act to perform its part. The bowel can be trained as well as the finger or the hand. I have known a physician who regularly had a stool soon after he was summoned at night to an obstetric call, a practice which he adopted early in his professional career, in order to avoid trouble which once befell him when in attendance upon a tedious case. At that time he could not escape from the bedside of a woman in labor for hours after he had been suffering distress,and it was this experience which had induced him to acquire the habit. One of my own patients, having similarly suffered at a social gathering, established a habit which required him to go to stool as soon as he had put on his evening dress coat —an uncomfortable trick, from which, as he grew older, he could with difficulty escape. Any one who has had occasion to watch, with careful attention, the habits of the domesticated lower animals, has noticed how regularly they attend to the calls of nature, and at periods, too, when most conducive to their comfort. Thus a horse will often stale regularly before his bed is made for the night, lest otherwise it be made uncomfortable for him ; and the first out-going in the morning, from the air of the stable to that of the outer world, will time his morning movement. It is needless to say to one who has given any attention to the subject that patience, aided by a little wisdom, can train the most rebellious bowel to the needs of the constipated.

And the second point, to which I have referred, should not be overlooked. Every train-dispatcher of a railway organization understands that the regularity with which his engines and cars reach their destination is proportioned to the regularity with which they are dispatched over the road. And so, when the food is regularly, (usually three times in the day,) made to enter the upper part of the alimentary canal, if the digestive activity be not interrupted, there will regularly arrive at the lower part the débris left by the complicated process to which it has been subjected. If then this lower part be regularly emptied, it follows that the entire transit from end to end will be liable to fewer interruptions, and be thus in other ways more perfectly accomplished. On the contrary, if the food regularly enters the upper

part, and the debris be only irregularly removed from its lower part, it follows that the transit from end to end will be correspondingly less regular, and disturbances of all kinds be, as a consequence, much more readily induced. It cannot, in brief, be denied that mere feculent accumulation in the rectum exercises a potent influence high up in the alimentary canal. He who argues otherwise has the most imperfect knowledge of the human economy.

Thackeray, in some clever verses which describe a little page, sighing and singing beneath the window of his sweetheart, Bonnie Bell, cries:—

"Wait till you come to forty year!"

It is rarely before the fortieth year of life that the need, the importance, and the value of a satisfactory movement of the bowels each day, is fully appreciated. Happy the young man or the young woman who, as to this matter, receiving well-timed counsel from the lips of a wise physician, is careful to observe the same through all the years of advancing and maturing age. Happy also the physician who, with a brain enriched with the treasures of pathology, the wealth gathered by the aid of the microscope, and the ore mined from a crude materia medica, has the prudence and judgment to know in what cases their precepts must be interpreted in the light of a profound study of the social habits of the people among whom he moves; a physician so high-hearted that the loss of the few shillings he might gain, by ordering drugs in a prescription, is more than weighted by a conscientious desire to meet the real physical needs of those who come to him for help. Happy, too, that commonwealth whose physicians are esteemed, yea, and well rewarded also, for a wisdom that is somewhat larger than a dispensatory, and stronger than to ask the aid of an apothecary in achieving its highest ends.

The Chicago Throat and Chest Hospital received a set of laryngeal instruments from Messrs. Sharp and Smith as a Christmas gift.

Hospital Reports.

ARTICLE VIII.

COOK COUNTY HOSPITAL. SERVICE OF T. BIDWELL, M.D. MOTOR DERANGEMENT OF THE HEART—SYNCOPAL ATTACKS —DEATH—AUTOPSY. Reported by C. E. CURRIE, M.D., Des Moines, Iowa.

A. S.; German; male; occupation, cook; admitted to hospital Aug. 14, 1883.

Patient's mother, previous to her death, had two attacks similar to his present illness. Otherwise his family history is good. He uses alcoholic beverages moderately. No venereal history.

Patient had always enjoyed good health prior to August 1. He then had several attacks of syncope and dyspnœa, but gradually recovered. Had never noticed symptoms of trouble previous to that time. No dyspuœa; no palpitation of heart.

Present illness began at 5:00 A.M., on day of admission. Suddenly and with no premonition, except a feeling of "heat in the head," he fell and lost consciousness. He remained in this condition for about five minutes. He then got upon his feet with difficulty and went out on the street, thinking he would feel better in the open air. He remained on the street during the day and had repeated attacks of vertigo and syncope. He also suffered from dyspnœa and "hot flashes to his head." He had slight cephalalgia. In the evening he was picked up by a police patrol wagon and brought to the hospital.

On admission he complained only of "heat in the head" and dyspnœa. Pulse, eighteen per minute, full and strong. Half an hour afterwards, when he had been placed in bed, his pulse

was twenty-eight. Temperature normal. Gave him atropiæ sulphas, gr. 1–60th, hypodermically, without producing any change in the pulse. The next morning he complained of slight dyspnœa and vertigo. Pulse, twenty-four.

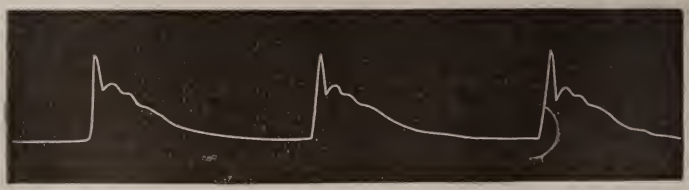
On examination find patient strong and well-nourished. Skin pale and moist, especially about the head. Conjunctivæ slightly injected. Pupils normal. His neck is very short and thick.

Thorax—Respiration hurried and superficial. No adventitious sounds.

Heart—Apex beat in normal situation. It cannot be felt distinctly by palpitation. There is also a distinct pulsation in the third interspace to the right of the left nipple. Area of heart dullness not increased. Slight blowing murmur with systole heard over base of heart and transmitted a short distance into the carotid and subclavian arteries. The action of the heart is slow and labored. Twice, while the stethoscope was applied to the praecordial region, the heart ceased to beat for some seconds, and the patient placed his hand on his head and and said he "felt just as he did when he fainted."

Abdomen—Somewhat distended. Percussion note tympanitic. No cerebral symptoms have been observed. Temperature (when taken) has been found nearly always subnormal. Respiration about twenty per minute.

A sphygmogram was taken Sept. 29, from the radial artery. Pulse, twenty-three. The following is a chart of his pulse rate, taken morning and evening, during August and September.



During the time he was in the hospital, the following drugs were prescribed: Belladonna, digitalis, strychniæ, sulph., sanguinaria, nitre, nitro-glycerine. phosphorus, whiskey, ammoniæ carb. and potass. iodide.

He was in the same condition during the early part of Octo

ber. In the last two weeks he had several attacks of syncope and finally died suddenly Oct. 30.

PULSE RATES.

	Morning.	Evening.		Morning.	Evening.		Morning.	Evening.
August 15.....	.....	30	Sept. 1.....	17	15	Sept. 18.....	26	20
" 16.....	28	32	" 2.....	20	22	" 20.....	20	18
" 17.....	32	28	" 3.....	17	22	" 21.....	22	23
" 18.....	34	28	" 4.....	18	24	" 22.....	21	.....
" 19.....	32	36	" 5.....	18	22	" 23.....	20	23
" 20.....	20	30	" 6.....	18	22	" 24.....	19	23
" 21.....	24	11	" 7.....	24	20	" 25.....	23	22
" 22.....	18	18	" 8.....	16	18	" 26.....	18	.....
" 23.....	28	22	" 9.....	20	24	" 27.....	22	22
" 24.....	21	15	" 10.....	19	20	" 28.....	24	28
" 25.....	16	16	" 11.....	24	22	" 29.....	23	22
" 26.....	19	16	" 12.....	20	22	" 30.....	23	.....
" 27.....	13	17	" 13.....	20	22			
" 28.....	15	18	" 14.....	17	24			
" 29.....	16	12	" 15.....	18	23			
" 30.....	20	18	" 16.....	18	22			
" 31.....	16	.....	" 17.....	19	20			

The autopsy was made by Dr. W. T. Belfield. The viscera of the abdominal and thoracic cavities were apparently normal. No lesions of brain or medulla were found. The pneumogastric nerves were also apparently normal.

A RARE CASE OF POISONING BY ATROPINE.

The patient, a woman 67 years of age, and very debilitated, suffered from an iritis of the left eye. She was treated for four days by instillation of a one per cent. solution of atropine into the conjunctival sac. On the second day she noticed after the treatment a dizziness in the head and dryness in the throat. On the third day the same symptoms appeared for a short time. On the fourth day, after leaving the clinic she became unconscious on the street, and fell to the pavement. In the hospital she was found to be delirious, the hands moving in all directions, pulse 190, temperature *elevated*, the pupils of both eyes dilated. Later on, the jactation of all the muscles was so considerable that a large board had to be fastened to her bedstead to prevent her falling out the bed. In the night the temperature was yet over 100. The symptoms entirely disappeared after three days.—*Memorabilien.*

Society Reports.

ARTICLE IX.

CHICAGO MEDICAL SOCIETY.

A very large attendance of members of the Chicago Medical Society were present at the regular semi-monthly meeting, held on the evening of November 19, for the transaction of considerable important business and hearing a number of scientific essays. The President, Dr. D. W. Graham, presided. In the absence of the Secretary, Dr. L. H. Montgomery, upon request of the Society, Dr. James E. Henderson acted as Secretary *pro tem.*, and subjoined is the report of the proceedings, considerably abbreviated from his stenographic report:

Drs. Robert H. Babcock and W. L. Copeland, upon recommendation of the Board of Censors, were unanimously elected to membership.

Prof. E. C. Dudley, of the Chicago Medical College, read a paper on "The Immediate Operation for Laceration of the Perinæum." He advocated the operation immediately, or as soon after the confinement as possible, and discussed the subject in all its bearings. But as we expect to have the paper entire for publication in a subsequent number of the JOURNAL, we omit what would be an imperfect synopsis here. The reading of the paper elicited the following interesting discussion:

Dr. George H. Randall was particularly gratified that the matter of faulty and incomplete union of these cases had been brought so prominently before the Society. He himself had thought of the necessity for something more than we have gained

by the immediate operation; he desired the author to explain more fully the frequency of the transverse rupture.

Dr. M. H. Thompson thought possibly it made no particular difference whether the operation was deferred for two days after labor or longer. My experience shows that in a much longer time after the operation for laceration than is recommended in the paper, I have placed the knees together, ordered the nurse to keep the parts clean with a douche of carbolized water, and taken all the necessary antiseptic precautions, and I have had perfect union to follow. I have again known cases in which union was obtained, but it occurred irregularly, where perhaps the edge of the mucous membrane would be attached to a quantity of muscular tissue, but the union was firm. I think the patient can be placed in different positions so long as it is done with gentleness, but I do not understand why it is so essential to keep them on the back as stated in the paper.

Dr. R. H. Engert—If the laceration is found to be very deep, if it involves the rectum, I do not think a patient should be operated on under two months, and I will ask the author of the paper if he would operate, under any circumstances, immediately after confinement, no matter how deep the rupture? I lately had a case where there was a laceration in three different places, sideways up into the vagina, about an inch into the rectum, and in the perinæum proper toward the right side, and occurred to a woman with the tenth child. In this case I do not think it would have been practicable to perform an operation right after her confinement, as the parts were so much bruised that it would have endangered success in operating. Three months after the labor I performed an operation with perfectly good results, and which have been maintained up to the present time.

Dr. E. Ingals said: It is perhaps presumptuous for me—a general practitioner—to engage in this discussion, for what can I hope to add to that which has already been said, on a subject that has been so fully treated by those who make a special study of gynæcology. Yet I think there are some useful practices relating to the management of perineal laceration that have not been alluded to. I will say in advance that I am conservative in my views, both in the profession and out of it. I do not easily

relinquish old practices. I think the profession is inclined to trust too much to things because they are novel, and about which we hope more than we know; and to reject measures whose usefulness has been demonstrated by long experience. The past history of our profession is full of treasures that have been discarded and that lie neglected all along its pathway. For many years I have attended such a number of obstetric calls as naturally fall to the lot of a general practitioner. Of course, I have seen a good number of perineal lacerations. I will tell you what I have not done for them, and the results. I have not bound the limbs together, I have not required the patient to lie on her side, but have allowed her to take the position that she found to be the most comfortable. I seldom tell her that anything is wrong. If the laceration is extensive I may say to the nurse, "The skin is a little torn; see that the parts are kept scrupulously clean." No woman that I ever attended has had the primary operation performed, nor do I know of one who has had it done secondarily. I do not believe that any one of them would have been benefited by either operation. I can recall but a single case that required anything except cleanliness. This was a primipara, in whose case a severe labor and instrumental delivery resulted in extensive laceration. The wound did not heal kindly, and I stimulated the granulations by a few applications of nitrate of silver. She has since borne a number of children in rapid succession, and has had excellent health. I have cases of laceration that have remained under my observation twenty-five years, and they have experienced no trouble from it. I have had no case that I think would not have been injured by the primary operation. This operation must give the patient some shock and inconvenience, and it may increase her septic dangers, and all this when she is just emerging from the pangs and perils of labor. One-half of the cases of confinement in Chicago are attended by midwives, and I do not suppose any of them have this operation performed. I have consulted a number of the older practitioners of this city, and they all manage their cases just as I do mine, and are rewarded with like results. We should not forget how well the lacerated perinæum will do when left to the reparative processes of nature alone. I am embarrassed in

not being able to assent to the teachings on this subject of eminent gynæcologists, but I should feel that I had done less than my duty, if I neglected to say a word in behalf of the poor women who bear our children.

Dr. J. H. Etheridge at this point asked the doctor—you say you never saw a case benefited by the operation? Answered—No case that I have ever attended in my own practice; but if the laceration is very extreme, and consequent prolapsus has occurred, then no doubt the operation would be beneficial. No case in my own practice, primarily, I am sure—and so far as I know, secondarily—has been benefited by the operation.

Dr. L. A. Harcourt—My own experience has been rather limited, but for seven or eight years, I think, I never saw a case of rupture of the perinæum. I said to some of my neighbors, physicians, I have never in my practice had a case of this kind. I was cautioned to examine my patients after confinement. Heeding this caution, and examining them carefully, I found quite a number, and for the past three years I have operated in every case where I was permitted; what might be called the immediate operation. In some cases I delayed twenty hours; not longer, and in every case union by first intention was obtained. The gentleman preceding me spoke of the fear of alarming patients by telling them a serious accident has occurred. It is not my practice to tell a patient in a way that would alarm her. I have practiced the method spoken of in the paper, of paring the edges of the laceration, and I always use the deep sutures, passing them completely beneath the laceration; this, with good care, and the patients have all recovered. I have had only one case of "central laceration," which occurred eight years ago. The labor was quite easy, the child was small, and I was astonished to find a laceration. On examination next morning, I found a small perforation, closer to the vaginal outlet than to the rectum. In that case I did nothing but use a mild application of nitrate of silver, so as to favor healing of the wound, and it proved a success. I think the danger of septic poisoning is overestimated. A year ago last March I was suffering from inflammation of the eyes, and was called upon to attend a woman in confinement. The child was very large. The head was born without any rupture to the peri-

næum; the cord was twisted around the child's neck, and I made an attempt to draw the cord down, so as to save the child from strangulation. Pains came on suddenly, the body was forcibly expelled, and tore the perinæum through entirely, the anterior half for three-quarters of an inch.

I was in no condition to perform an operation, and summoned a brother practitioner, who kindly consented to do so for me, if the patient did not object. Her friends, however, refused; she neglected every precaution in regard to cleanliness, and yet the woman made a good recovery. She came to me afterward and complained that she could not retain fæcal matter, but appeared to be in good health. Now, that was a most favorable case for blood-poisoning. All the surroundings were most favorable for it; no measures were taken to keep the parts clean. I am, therefore, in favor of the immediate operation in almost every case, for my own all resulted favorably.

Dr. T. P. Seely—My experience is, in succeeding to produce good results, simply by placing the patient on the side, fixing the limbs together, closing the parts and keeping them in apposition for a few days, and observing strict antiseptic precautions; and I would like to ask the author, while I am on the floor, why he places the patient on the "dorsal decubitus" during the operation, as I do not understand how he fixes the patient afterward.

Dr. Dudley, in closing the interesting discussion, of which the foregoing is a resume, said, relative to the frequency of the transverse rupture of which one member asked, that he was unable to answer positively. Within the past year, however, he has seen at the Mercy Hospital four or five cases of this kind; also, he had met with two cases in private practice. I am, therefore, inclined to think this form of rupture is quite common, Thinks incomplete central rupture of the perinæum is the form which most often occurs; have noticed cases in which central rupture had occurred, and in which the posterior commissure had not been ruptured at all. Under these circumstances the rupture is always overlooked, unless very careful examination is made with one finger in the vagina and one in the rectum. If Emmett's idea is not very much the best, then the basis of it may rest in the fact that in incomplete rupture the transverse variety is the

most ordinary form. I do not know whether this is the case, but when that form of rupture occurs, the perinæum divides in front so that the parts go to either side, and the shape of the wound is like the letter T, as was stated in the paper. Moreover, I do not mean to say positively that after contraction of the cicatrix, that it will be a cause of a smaller perinæum, but it may be a possible cause, and as one of the speakers asked, if I would operate within two days after laceration occurred? I can reply by stating, Yes, or sooner; and if not called sooner, I should operate on the strength of my experience. I prefer the dorsal position, with the thighs flexed and a small roll placed under the knees. This is the best position for the patient. There is no objection to placing a patient on the side if she again will assume the dorsal position; and the patient generally finds the latter the easiest. I always place a bandage around the knees and legs to keep them constantly in tbe same position. My experience in the primary operation for complete rupture through the sphincter ani muscle is confined to one case, in which union occurred. Apparently, the union of the perinæum was pretty good, but not as good as if a better operation had been performed, there being a slight recto-vaginal fistula left. The patient has had several children since. I think I will make this statement in general, that I would operate in every case of ruptured perinæum, especially if the rupture involved the deeper structures of the vaginal portion, but where rupture occurs through the sphincter ani muscle, in a majority of cases union does not take place, although cases of this kind are on record in which union of this sphincter has occurred. There are cases in which the internal sphincter muscle has been equal to the retentive needs of the patient. Regarding the needle to be used, the one used by Thomas, Emmett and others, is a straight one. The reasons for preferring it are the following: A straight needle can always be introduced in such a way as to know where the point is if you know its length. The curved needle is much larger, and makes a larger incised wound after every suture. The straight needle is perfectly round, and makes a punctured wound, and, again, *per se*, there is an unnecessary amount of damage done with a curved needle. This central transverse rupture is one in which it is difficult to see

how the parts can be kept in contact by tying the knees together. The tissues retract afterward, and tying the knees together would have no influence at all unless with the vaginal portion of the wound; neither would sutures passed through the cutaneous surface of the wound—only sutures passed in the axis of the vaginal outlet could, under these circumstances, bring that torn tissue down to the place from which it was torn.

A paper on Glycosuria was next read by Dr. Oscar C. DeWolf, (see this paper) published in the *Journal of the American Medical Association*, Nov. 24, 1883. Discussion upon this very important subject was deferred until the next meeting.

Dr. F. E. Wadhams was to have presented a paper on "Nerve-Stretching" for the relief of an obstinate case of sciatica, but the late hour precluded its being read.

The resolutions presented at the last meeting regarding "The Nucleus of a Medical Library" were taken from the table, and Dr. Edmund Andrews said, "the formation of a medical department in the public library, accessible to every family physician in the city, is a greater public necessity than the duplication of a vast number of novels." The result of the conference with the public library board was that the books would have to be presented and not loaned to the library. This Society would incur no expense in taking care of them. He moved, therefore, the passage of the resolutions reported at the last meeting, and that $500 be appropriated for the purchase of books and journals, which was easily carried; also, that a committee of three on Library be now appointed by the chair, resulting in Drs. E. Andrews, F. C. Hotz and O. C. DeWolf forming the committee for three years, two years, and one year each, in the order their names appear. Dr. J. G. Kiernan wished to have a committee on Medical Legislation appointed, as many of the laws relating to our profession in this State are in a very unsatisfactory condition. Particular reference was made to the confidential relations between physician and patient, and the former's appearance on the witness stand, as any member of this Society may be compelled to reveal the secrets of a patient. For this and similar reasons he offered the above suggestion in the form of a motion, to determine what measures are needed to remedy existing laws on this

subject. The motion was unanimously carried. The chair announced that he would appoint the committee at the next meeting.

Another motion made and seconded that we do now adjourn, was also nnanimously tarried. L. H. M.

PRIAPISMUS CAUSED BY LEUKEMIA.

The patient, a Hungarian, 35 years of age, suffered from intermittent fever, and a bronchial catarrh for six months, and at this time there were daily erections lasting two or three hours, but during the last two weeks the erections were perpetual. The glans penis takes no part in the erection, and the urethra is soft and sometimes compressed to such a degree that catheterization is necessary. The spleen is enormously enlarged and the white blood corpuscles are multiplied as 1 to 1. The connex between the two conditions is not known.—*Pest. Med. Chir. Pr.*

COFFEE IN STRANGULATED HERNIA.

Dr. Antonio P. Sarra was called to attend a man 63 years old, affected with a right crural hernia. He found the patient in a cold state, without an appreciable radial pulse, with a pinched face, and frequent efforts at vomiting. He called to mind a case successfully treated by Dr. Foussagrives with coffee, and published in 1880, and therefore ordered an infusion of the berry to be taken internally, and also to be applied externally. He left the patient, and notified the family that if a prompt improvement did not ensue death would be inevitable. The next morning he found the patient in excellent condition. On inquiry, it was learned that after taking the coffee he felt immediately refreshed and stronger, passed a great deal of gas by the stomach and by the rectum, felt a "roaring" in his intestines, and having place his hands on the tumor, the hernia was immediately reduced.—*Siglo Medico, Lyon Medical.*

Editorial.

ARTICLE X

THE COLLECTIVE INVESTIGATION OF DISEASE.

There are many points upon which doctors differ, as those who are not doctors have long since sarcastically remarked. But there are also many points upon which doctors are quite agreed, an observation to which those who are not doctors give very little heed. The relative proportion existing between the two, facts disputed and facts accepted, it is not easy to determine. All, however, are quite in accord respecting the pressing need of enlarging the proportion borne by the latter to the former, respecting the lamentable doubt which enshrouds too many facts often held to be indisputable as to proof, and respecting the always formidable disproportion between that which is actually known partly or fully, and the great unknown.

At no time in the history of the world has there been an age when, as compared with the present, the investigations of science have been more fearlessly pushed and the results more calmly weighed and more judiciously compared. At the same time it must be conceded that the net profit has been inferior in value and extent to that which might have been gained by the systematic efforts of the same investigators working with a harmony of purpose and method. The individual and isolated success of the man who discovers a "nugget" is far surpassed by the gross rewards of the company that exhausts a "vein."

These remarks are suggested by the general interest lately awakened in the subject of the collective investigation of disease, as this has been undertaken in England chiefly, but also it ap-

pears in the United States, in Germany and some parts of India. This investigation of certain special subjects connected with disease is conducted by the distribution of cards, whose blank spaces are to be filled with the data which it is desired to accumulate either touching certain specially selected diseases, or certain selected features of disease, or the action of certain remedies. The filling up of the blanks on these cards by separate observers and a subsequent collation of the accumulated facts, offer a most attractive prospect for the future progress of medical science. The late addresses upon this interesting subject, of the distinguished Professor of Pathology and Surgery in the Royal College of Surgeons, Mr. Jonathan Hutchinson, and of Dr. William Roberts, of Owen's College, before the Lancashire and Cheshire branch of the British Medical Association, together with the debate which they naturally suggested, present with clearness the advantages to be thus gained and some of the obstacles to be overcome.

Fortunately or unfortunately, the obstacles have usually to be first surmounted; and, therefore demand an early consideration. Not the least among these springs from the disparity in the attainments of the several colaborators. Medical instructors know only too well how difficult it is to teach men habits of accurate observation. But observation is not enough. The three-fold task of observation, record, and interpretation, is required of all scientific investigators. Some men fail in one, and some in another part of this important process. Thus in face of a fracture one man distinguishes with his eyes an ecchymosis and a helpless limb, but by his sense of touch fails to recognize any crepitus. He is sufficiently ignorant to decide against the possibility of fracture, not by reason of what he has actually seen but by reason of what he has failed to perceive by the touch. Another, equally ill-educated, observes the ecchymosis, makes sufficient record of it mentally, and failing to observe the other symptoms, diagnosticates a rupture of a blood vessel. The degree of education requisite to properly observe may be said to have no definite limit. What we have daily spread before our eyes and fail to interpret, makes up a world into which we never enter, so large that it has fired the zeal of all honest explorers since science was first cultivated among men.

Aside from the inevitable ignorance of many men, or to put it on a truer basis. the different grade of their attainments, there are obstacles in all such work to be found, in the carelessness and even the desire for notoriety which leads some weak men to report what they have never seen. Then rises another difficulty which Mr. Hutchinson wisely describes in advance, one growing out of an inevitable tendency to unduly multiply the points upon which information is wanted. In the diversity of these and their confusing tendencies, an attempt is made to do too much which results in doing nothing at all. It is one of the most difficult of lesions to learn, to cover patiently and faithfully a small corner of a wide field. Few have the indefatigable perseverance of a Darwin, to count the weeds that grow in a square inch of soil and the several varieties of insects that will visit it on a summer day.

Now, in the face of these and other adverse circumstances, it is pleasant to note that the results actually obtained have surprised all who have examined them, not merely those who were interested in the experiment, but even those who went into the examination of the returns with a despondent and gloomy opinion as to the fruit likely to be obtained. It has happened that the poorer class of men neither felt an interest in the work, nor exhibited any, while the returns were found to have been forwarded by the very best men in the several branches of the British Medical Association. Dr. Mahomed, in discussing the two addresses, declared that men had come to him and expressed their astonishment at the extent and valuable character of the material which had been accumulated; that it was evidently the work of men who had studied their cases, and recognized and recorded the facts upon the points required with perfect accuracy and with trustworthy results. The reporters on pneumonia, for instance, said that they believed there was not such a mass of information in existence in any other language as had been reported, and it would give rise to the most important monograph on the subject hitherto written, giving actual facts and statistical details about this disease.

Dr. Ransome, in his discussion of this same subject, declared that the results obtained were "quite unequaled, and would form

in the future a mine of information on the subject, not only of epidemics, but other diseases."

Dr. Roberts, referring to the admirable report on the communicability of phthisis, drawn up by Dr. Burney Yeo, declared that no candid person, after comparing the report with the detailed evidence upon which it was based, could fail to conclude that a healthy person should not be permitted to occupy the same bed with a sufferer from pulmonary consumption; and that no person with an hereditary predisposition to tuberculous disease should be allowed to have continued and intimate personal contact with a phthisical patient. The speaker went on to say that, in his opinion, a grave responsibility would be incurred by a medical man possessed of this evidence, no matter what his theoretical opinions might be, who would permit such cohabitation and close personal contact.

Some of the issues and subordinate questions brought to the front in the addresses and subsequent debate are suggestive—some rather amusing—yet others little likely to be of any practical value in the end.

Thus, Dr. Roberts suggests that one of the most promising fields of labor for combined observation, is the self-study of disease by medical men. He admits that it would be rather a tragical task for the physician affected with a fatal malady to make a study of his serious symptoms, and suggests "the dyspepsia of healthy persons" (*sic*) as a fertile field, in the belief which he expresses, that at least one of ten of the ten thousand members of the British Medical Association is an habitual dyspeptic of one type or another. These remarks, it must be confessed, sound rather oddly to us on this side of the Atlantic. Our British friends have so often charged us with being a nation of dyspeptics, that we should expect to find our medical brothers exhibiting their due proportion of such a disease, but we are quite confident that there is nothing like such a ratio of dyspepsia among American physicians.

But, we do not believe that the best information respecting any disease will ever be gained by physicians who are its victims. They who have had much to do with the treatment of medical men, have been taught that in proportion as a doctor becomes se-

riously ill, he departs from the professional plane and approaches that of the most unlearned of patients. Introspection, self study, self observation, may suffice for the intricate absurdities of certain schools of philosophy, but, like solitary vices, they are not promising methods for the accumulation of scientific facts.

Again, Mr. Hutchinson's view that the rarer and curious maladies should be especially selected for collective investigation, is certainly worthy of consideration. To know the rule, it is certainly necessary to understand all its exceptions. There are few observers of large experience who have not again and again become convinced of the fact that what is generally deemed to be new and rare is often indeed old and common but unrecognized; and that the maladies of men, in all ages and in all climates, are as kindred to each other as are the races of mankind themselves. But still we must admit that the list of rare diseases presented by Mr. Hutchinson is one containing the names of maladies so exceedingly rare that they may never be encountered in a generation of active practice. Such, for example, are rhinoscleroma, Hodgkin's disease, Paget's osteitis deformans, and Charcot's joint disease. It is difficult to imagine that even twenty-five per cent. of all the medical men to whom the results became accessible would be greatly better for the observations of four thousand of their studious brethren upon these points. We can imagine, however, that a much larger proportion would very much like to have the results obtained by even one thousand skilled observers upon, for example, the significance of symmetrical contracture of the digits in diseases of the cerebro-spinal tract, or upon the characters which distinguish the several varieties of lumbar pain in nephritis, peri-nephritic abscess, muscular rheumatism, certain of the exanthemata, menstrual disorders, and over exertion. They certainly would be interested in knowing the effects of the several medicaments recognized as valuable in spasmodic asthma, after the administration of each in say two hundred similar cases. In some such homely investigations of disease it is possible that there might be awakened a livelier interest, by the anticipation of results which could be made more immediately and practically useful.

Still, it is far more easy to criticise than to commend, and in

the present case certainly commendation alone is required. We take this opportunity of directing especial attention to this important subject, with a view to more widely interesting the medical men of our own country in the same fruitful field. They who are in the forefront of the unresting scientific activities of our day see that the immediate future of medical knowledge involves very remarkable and radical changes. It is about to rest on many more established facts, with much less speculation in all the elements of its structure, and with the plucking out of enormous quantities of effete material, with regard to which it may be questioned whether it has ever been of even temporary advantage. The collective investigation of disease, simultaneously conducted in different countries, by men of intelligence, with the proper training, experience, and opportunities, is certainly one of the means by which this end is to not merely to be gained, but is actually in process of attainment.

COUNT RUMFORD.

An article from the pen of Mr. John Tyndall, lately published in the *Contemporary Review*, recalls attention to the eventful and even romantic career of the man, who, beginning the study of medicine with Dr. John Hay, of Woburn, concluded by becoming a German nobleman and the commander of the Bavarian forces at Munich. Dr. Ellis and others have already made Americans familiar with the career of their remarkable countryman, but there is a certain charm in reading the story as narrated by an English author, who actually visited the little town of North Woburn, nine miles distant from Boston, where Rumford, or, as he was named before his elevation to the knighthood, Benjamin Thompson, first saw the light.

It is, indeed, a strange career, one scarcely possible except in those pregnant days, when Americans, then barely occupying a slender strip of the seaboard of this country, stood face to face with the nation against which they had drawn the sword. They were days when the men who determined to remove from the circumstances of early life, made excursions eastward across the sea, rather than as now to the remote regions of the West.

We read with interest of the earliest studies of the young lad in algebra, geometry, and astronomy, finding time with all this and with a weekly allowance of but two shillings and five pence, for devotion to the music of which he was passionately fond, and for perfecting his skill as a draughtsman. We trace the direction in which his mind was turned, whether in the effort to construct a "machine for perpetual motion," or to discover "the nature, essence, beginning of existence, and rise of the wind in general, with the whole theory thereof, so as to be able to answer all questions relative thereto." We are interested again in the items relating to his small economies, even crediting the doctor's wife with a pair of stockings which she knitted for him. We see him again spacing out the hours of his day: "From 11 to 6, sleep. Get up at 6 o'clock, and wash my hands and face. From 6 to 8, exercise one-half and study one-half. From 8 to 10, breakfast, attend prayers, etc. From 10 to 12, study all the time. From 12 to 1, dine. From 1 to 4, study constantly. From 4 to 5, relieve my mind by some diversion or exercise. From 5 till bed-time, follow what my inclination leads me to, whether it be to go abroad, or stay at home and read either anatomy, physic, or chemistry."

Married when but 19 years of age to a wife of 33 (the widow of Col. Rolfe), he becomes a Major in the Second Provincial Regiment of New Hampshire when less than 20. In three years more, having been twice acquitted from the taint of Toryism, we are scarcely surprised to discover him, almost immediately after his escape to Europe, officiating as under-secretary to the American Secretary of State, Inspector of Clothing, and Lieutenant Colonel Commandant of the New York Horse Dragoons. Returning to this country, we find him commanding the cavalry in South Carolina under Leslie, and in New York in active command of the King's Own. The very next year he is crossing the English channel with the historian Gibbon, who describes him as "secretary, colonel, admiral, and philosopher." Thence he pushes on to Strasburg, and is knighted by the King on the 23rd day of February, 1784. Here again we find him a colonel of a cavalry regiment, living in a palace with the Russian Ambassador, surrounded by a military staff, talking three languages,

and studying the population, resources, employments, and modes of development of the people for whom he was laboring. Minister of War, Minister of Police, and Chamberlain of the Elector, he does not find it beneath his attention to plan how the soldiers, their children, and even the children of the neighboring peasantry should be taught writing, reading, and arithmetic. He drains marshes, cultivates the potato, and puts all the beggars of Bavaria into an industrial establishment. He constructs a kitchen, and provides a dinner for 2,000 people with the smallest amount of fuel which could be employed for such a purpose.

In 1796, Rumford founded the historic medal which bears his name, and soon after we find him in command of the forces of Bavaria, fighting the French and Austrians from the gates of Munich. Thence he goes with plenipotentiary powers to the court of London, and is next offered the superintendency of the Military Academy of the United States, with the office of Inspector General of the American forces.

We find him on the 13th of January, 1800, instrumental in laying the foundations of the Royal Institution of Great Britain, in conjunction with the Earl of Winchester, Lord Morton, Lord Egremont, and Sir Joseph Banks. Not the least interesting act of his singularly interesting career, is what might be called his discovery of Humphrey Davy.

This is, perhaps, a great and glorious career, but indeed not greater nor more glorious in the substantial results to the world at large than the fruitage of many lives we might name, of men who began the study of medicine in a small New England town, who were never decorated with the emblems of foreign rank, and who never led a regiment of dragoons into action.

For all this, however, such a career as Rumford's will always in one way possess special value for us. The luster which it sheds, falling on the eager eyes of many a young man whose ambitious projects might be thought to be dwarfed by straitened circumstances or a humble origin, will always point to broader enterprises and the honorable rewards of industry and well doing in small things.

Books and Pamphlets Received.

BOOKS.

A Manual of Pathology. Joseph Coates, Glasgow. Philadelphia : Henry C. Lea, Son & Co. Jansen, McClurg & Co.

Insanity in its Medico-Legal Relations. T. Buckham. Philadelphia : Lippincott & Co. Jansen, McClurg & Co.

Venereal Diseases. Bumstead & Taylor, Fifth edition. Philadelphia: H. C. Lea, Son & Co. Jansen, McClurg & Co.

Chemistry, Medical, General, etc. Attfield. Tenth edition. Philadelphia: H. C. Lea, Son & Co. Jansen, McClurg & Co.

Manual of Practical Hygiene. Parkes, Wood's Med. Lib. Sept., 1883 Keener.

Training Schools for Nurses. Notes on 22 Schools. W. G. Thompson New York: Putnams Sons. Jansen, McClurg & Co.

Chemistry, Organic and Inorganic. Bloxam. Fifth edition. Philadelphia: H. C. Lea's Son & Co. Jansen, McClurg & Co.

Hand Book of Therapeutics. Ringer. Tenth edition. New York: Wm. Wood & Co. W. T. Keener.

Materia Medica and Therapeutics. Bartholow. Fifth edition. New York: D. Appleton & Co. Jansen, McClurg & Co.

A Treatise on Syphilis in Children and Infants. P. Diday. Translated from French by G. Whitley. New York: Wm. Wood & Co. W. T Keener.

Bright's Disease of the Kidneys. Henry B. Millard. New York: Wm Wood & Co. W. T. Keener.

Medical Ethics and Medical Etiquette. A Symposium from the Liberal Standpoint. G. P. Putnam's Sons.

Elements of Histology Manual. E. Klein. Philadelphia: H. C. Lea, Son & Co. Jansen, McClurg & Co.

Manual of General Medical Technology. Edward Curtis. New York : Wm. Wood & Co. W. T. Keener.

Physicians' Memorandum Book. Arranged by Joel A. Miner, Ann Arbor, Michigan.

The Physicians' Pocket Day Book. Designed by C. Henri Leonard. Illus Med. Journal Co. Detroit, Mich.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service.

PAMPHLETS.

The Study of Neglected Lacerations of the Cervix Uteri and Perineum. Ashby.

Concealed Insanity. Case of Mark Gray. Brower.

A Tracheotomy Tube for Gradual Withdrawal. Hendrix.

The treatment of Syphilis. Sims.

Remarks on Ovariotomy Treatment of Pedicle.

Alcoholic Insanity. Mason.

Antiseptic Treatment of Typhoid Fever. Smythe.

Prof. Geo. H. Rohe, of Baltimore, has been delivering a course of lectures upon Hygiene before the Minnesota College Hospital. The lectures have been replete with information, and should have been listened to by the profession of the State, as well as by the class. Dr. Rohe's delivery is quiet, but very effective—his subject matter is beyond criticism. Many of our prominent physicians have been urging his removal to Minnesota, for the practice of his specialty (dermatology), but his engagements with his own college (Physicians and Surgeons of Maryland), may prevent.

Prof. Rohe was tendered a reception by Dr. Stone, Friday evening the 26th ult., meeting all the leading members of the profession of St. Paul, who were unaminous in the expression of their desire that Dr. R. should locate with us permanently. Dr. R. is obliged to cut his visit to St. Paul short, as his engagements at Detroit, during the meeting of the Public Health Association, are imperative.

We wish to congratulate the college upon having secured the course, and the profession at large, upon the prospective addition to its membership.—*Northwestern Lancet.*

Domestic Correspondence.

ARTICLE XI.

JEFFERSON, November 28, 1883.

TO THE CHICAGO MEDICAL JOURNAL AND EXAMINER:

In the November number of the JOURNAL appears an original communication from the pen of "S. V. Clevenger, M.D., Special Pathologist Cook County Insane Asylum," in which the writer treats of the early medical progress of the asylum, and in a manner which calls for more than a passing notice in the interest of justice, the profession, and the history of an institution now become so prominent and the source of such an extended public pride. The obligation to make such mention devolves upon me equally, perhaps, with any of the other individuals made mention of therein.

So far as space permits, I intend to give "an exact history" of the subject matter, as avowed to be the purpose of Dr. C. Unlike him, however, I am not prepared to admit, by any means, that the "paucity of asylum papers dating earlier than 1878" can interpose to baffle me in my humble efforts.

The great Chicago fire, while it has enabled the designing to cast clouds upon our titles to property in the destruction of valuable records relating thereto, has not destroyed living witnesses and private and public records of institutions to such an extent as to jeopardize the compilation of a fair history of any institution of prominence. Such a compilation is beyond the limits of space properly allowed to an article in the nature of a rejoinder, but it is among the contributions to be expected in the near future, and the ashes of the Chicago fire will not have to be

disturbed in search for any of the materials requisite. It is sufficient at present to make not a simple correction but to give foundation to a protest in justice not only to myself, but to many, if not all of the officers connected with the county institutions in the earlier days, and when the same were laboring under embarassments now so happily removed. The pioneers that break the ground are not disposed to suffer a denial to some reasonable claims to a share in the fruitage.

It appears from the article in question that "from October 1, 1867, to January 10, 1871, Dr. D. B. Fonda had charge of the Poorhouse as medical visitor." This item of history is absolutely correct. Under the regime covering this period, it is vouchsafed that "the warden was a more important personage than the doctor;" but the compliment to the warden is nettled by the following:

"The welfare of a patient was insignificant alongside the chances of stealing a dollar or so in those days." Such a statement, read before a gathering of no less dignity than a medical society, would be impressive, if true. Having no foundation whatever, it bears a degree of ghoulish personality, not usually found in standard historical literature. I respectfully supplement the innuendo with the simple statement, that from the records still extant, it appears that during the said regime the cost of caring for the inmates of the institution reached the quarterly sum of only $17 per capita, a lower rate than appears at any time before or since said administration, and it does not appear from observation or from the records that the patients and inmates of the institution at that time fared less sumptuously than those of an earlier or subsequent date.

It appears further on in said article that "Dr. John W. Tope was appointed Medical Superintendent January 1, 1871." "*By this time* the poorhouse had outgrown itself, and the necessity for differentiating insanity from pauperism had become apparent enough to justify the erection of a large brick building capable of accommodating 300 patients." This statement furnishes an index by which to judge concerning many others contained in the article, but I will content myself with an allusion to it alone, not that it is a matter of supreme importance to the public to

know what particular official has been instrumental,by council or report, in the establishment of an asylum for the insane separate from an institution for paupers, bat as giving the true history of this special movement, and in relief of the old corps of officers from the inuendo of having made a dollar in the public coffer of one department balance with the welfare of a patient in another department.

A reference to the official proceedings of the Board of Supervisors, held in December, A. D. 1876, discloses the correct historical data covering this subject. In the same report as then published, it appears that a report was presented to the Board by me as Physician for the County Poor House and Insane Asylum, specially setting forth the inadequacy of the one building occupied to meet the demands made upon the county by both the poor and the insane, and recommending that special provision be made for the accommodation of the insane, and that a separate building be erected for their exclusive occupancy, under a system of "differentiating" the two classes of public wards.

It appears further, that the Board took action on such report, and immediate steps were taken toward the erection of the present asylum building. The building was rapidly completed, and made ready for occupancy, and on January 1, 1871, the insane were transferred from the old quarters to the new, before my official career was ended, and under my personal superintendence as physician in charge.

Such is history, and in such brief terms its assertion. It is a subject of general congratulation now that the county's efforts to found a system broad enough to meet all public and charitable requirements, has resulted in a natural growth, and has reached so flattering a result, in the institutions now so admirably completed and systematized.

A fair history of their growth and a true appreciation of the humble efforts of the many who have labored to bring about the result, are not,I submit,enhanced by an article of so much prominence as the one referred to, and one teeming with so much reckless inaccuracy, and tinctured with such inexcusable and flagrant injustice. As will be noticed, I have not found it necessary for the purpose of this communication to refer to numerous authori-

ties; but may be permitted to remark that the available resources of the records are not easily exhausted.

Concerning the "statistical information" given in tabular form, and forming the latter part of the article referred to, I have nothing to say as of serious interest to the public, since, if there be not a much larger degree of accuracy underlying the same than appears to have been displayed in the historical portion, the figures as tabulated lose claim to any degree of importance.

D. B. FONDA.

PROPHYLAXIS OF MALARIA.

The *Journal d'Hygiéne* has reproduced a report of Tommasi Crudeli to the Italian Parliament, on the prevention of malaria. He insisted strongly on the value of arsenic as a prophylactic, taken in a daily dose of 2 to 8 milligr.; he also mentioned the method advocated by Dr. Maglieri, of treating obstinate malarial infections by the administration of a simple decoction of lemons. This is the mode of preparation: Take a fresh lemon, and cut it in thin slices without peeling it; boil these slices in a new earthen pot with three glasses of water, until reduced down to a glassful; strain the whole through a cloth, and squeeze well the boiled lemon, and let the whole stand for a night to cool. Maglieri has tried this singular remedy not only in cases of chronic malarial infection, with a marked cachexia and rebelliousness to any other known remedy, but also in some cases of pernicious fevers, and always with success. The observations of Titus Piacentini confirm the efficacy of the decoction of lemons. Among the non-volatile substances so far found in the lemon, there are two, the *Hespéridine* (C^{22}, H^{26}, O^{12}), and the *Limonine* (C^{26}, H^{30}, O^{5}), which may be the active principles of this medicament. The former is found in all the parts of the fruit, the latter in the seed. But nothing certain is known of the physiological action of *hespéridine* and of *limonine*, and all the hypothesis that can be framed regarding this will be, in our present state of knowledge, entirely premature.—*Journal de Médecine et Chirurgie.*

Original Translations.

By A. LAGORIO, M.D.

EXTRACTION OF A LARGE FOREIGN BODY, SITUATED IN THE RECTUM.

Dr. Josè Senilla Victorio reports an operation of this kind (*Revista Medico-quirurgica*) performed in 1882, by Dr. Mantes de Oca, in the Hospital of Buenos-Ayres, on a man named E. Chaillot, aged 35 years, and of good constitution. This individual was said to have once placed a medicated bougie in the rectum, and to have then felt a special sensation accompanied by an erection of the penis and an ejaculation; this sensation was more pronounced when he touched the anterior surface of the rectum. Having discovered this means of obtaining a systematic evacuation, he frequently resorted to the bougie, increasing it in volume in order to obtain the desired effect. Little by little he used instruments of greater size and of a different composition, until he employed finally a porcelain insulator, such as are generally seen on telegraph posts; they have a smooth surface and a groove near the superior extremity; at the base they have a deep concavity. The dimensions of these bodies are: height, 10 cent.; superior diameter, 5 cent.; inferior diameter, 8 cent.; circumference at the base, 29 cent. The insulator did not have a length sufficient to insure its being held during its introduction, and when introduced it became impossible to withdraw it, although he had placed a twine around in the groove. Different attempts at extraction were made, with no success. A small fragment was broken off around its base. The forceps, the Liston pincette, were applied, but they only served to break off fragments. The condi-

tion of the patient was very bad. A capital operation was decided upon. The patient was chloroformed, the operator introduced his oiled hand in the rectum and successively used the Pajot's forceps, a curved trocar, and a linear constrictor of Chassaignac. Nine attempts were then made in three hours, but the body remained in the intestine; gangrene had already set in; rest was ordered and opium given to ease the pains, but the operation became urgent and Montes de Oca returned after eight hours. Chaillot was again placed under the influence of the anæsthetic. The surgeon then opened the abdominal cavity and incised the large intestine at the inferior extremity of the sigmoid flexure, and extracted the body. The borders of the incised colon were sutured, the abdominal cavity cleansed and closed. The operation lasted three hours; syncope occurred and was overcome by artificial respiration. Some hours after the patient died. At the autopsy the injured parts presented a very satisfactory condition, the sutures were perfect. The death could not be attributed to the operation itself, but to the gangrene already commenced before the operation, to the shock, and also to the repeated use, at short intervals, of an anæsthetic agent causing a true intoxication.

QUEBRACHO AND ITS ALKALOIDS.

Huchard and Eloy read a paper before the Therapeutical Society of Paris on the physiological, toxic, and therapeutical properties of quebracho and its alkaloids. *Quebracho Blanco* is a beautiful tree, growing in the Argentine Republic. The bark, which is the only active part, is there used as a tonic, febrifuge, and anti-asthmatic. Penzoldi experimented with it on animals, and found that in toxic doses it produced death, with paralysis of the limbs, intense dyspnœa, and asphyxic convulsions. Quebracho possesses six alkaloids: aspidospermine, asperdospermative, aspidosamine, quebrachine, hypoquebrachine, and quebrachamine. Besides these, also, quebrachol, of an alcoholic character. The aspidospermine of commerce, used by all experimenters, is a mixture of all the alkaloids. The authors have found that all these different alkaloids have different properties, and almost antagonistic. They have employed the alkaloids

prepared by Tauret, and experimented with them in the laboratory of Brown-Sequard, on dogs and rabbits. Aspidospermine increases the amplitude of the respiratory movement, and accelerates this movement in all the animals. These modifications of respiration come on five to ten minutes after the subcutaneous injection of 4 to 5 centigr. of the chlorhydrate of aspidospermine. In toxic doses, the respiration becomes embarassed, and the animal dies in convulsions. Aspidospermine does not kill by asphyxia. In the autopsy of all animals the blood was found to be vermillion red, as in poisoning by prussic acid. The temperature is lowered from 39° to 36° 5 C.

Quebrachine has an action entirely different from that of aspidospermine. It seems that it acts as a paralyzer of the respiratory muscles. Greatly more toxic than aspidospermine, it produces death by asphyxia, with a black coloring of the blood and elevation of temperature. An animal died in five minutes after an injection of three drops of a 4 per cent. solution of *quebrachine*, hypoquebrachine, and aspidospermine. Huchard concluded that aspidospermine is a modifier of the respiratory movements, an agent capable of arresting changes, and a refrigerant. These different properties are important in the diseases which produce dyspnœa, apnœa, and asphyxia.

Constantine Paul made an observation that quebracho contains much tannin; he had used it as a topical remedy in cases of vaginitis, blennorrhagia, metritis, etc.—(*Le Praticien.*)

MYXOSARCOMA OF THE PLEURA.

Dr. Hofmokl (*Soc. des Médic. de Vienne*, 1883) presented an observation of a rare affection of the pleura. The subject was a child three and a half years old. Had diphtheria when six months old, and a bronchitis when two and a half years. Last February contracted again a bronchitis, and recovered without presenting any serious thoracic symptoms. On the 12th of March, 1883, the author noticed some symptoms of uneasiness, a marked paleness, and an acceleration of the respiratory movements. On examining the chest he found at the base of the left side and posteriorly a marked flatness, with a diminution of the vesicular murmur, diminution of the vibrations and a relative

immobilization of the thoracic cavity. The heart is not displaced; pulse frequent; temperature 38.5 C. The doctor readly diagnosticated a pleural effusion of the left side.

Under the influence of quinine the temperature was lowered, the general condition seemed to improve. and the little patient regained his sleep and appetite. After eight days the fever returned; temperature 39° C. The flatness increased, with a thoracic bulging anteriorly and to the left, and the heart is displaced. On the 14th of April, on account of the progressive dilatation of the chest and the accumulation of the signs of the supposed effusion, the author performed thoracentesis. He only obtained a little sanguineous fluid. After the operation the dyspnœa increased. On the 17th he performed a second puncture with the same effect. Sharp pains supervened, with an increase of the dyspnœa, the doctor then decided to perform resection of a rib. The patient was anæthetized and a fragment of the right rib (1½ centimeters) was resected. The operation gave the same result as the former. The author then introduced a finger through the openings, and detected a tumor surrounded by softened sanguineous clots in great quantity. Notwithstanding the Lister dressing the patient succumbed after three days. At the autopsy it was learned that the neoplasm had its point of origin in the left pleura, and the microscope demonstrated the elements of a myxosarcoma.—*Archives Générales de Médecine.*

THE ÆTIOLOGY OF CONGENITAL DEFORMITIES OF THE BULBUS OF THE EYE.

Among women an "impression" in pregnancy is generally believed, but physicians have no reason to do so. The attention of scientists being directed to the development of eye fissure and the consequent anomalies of the eye bulb, it was found that the formation of the coloboma is an intra-uterine inflammatory process of the fœtus, which originates in the retinal fissure at a time of development when this fissure begins to close and which attacks the choroidea and afterwards the retina. Thalberg at St. Petersburg, reports eighteen cases of congenital deformity among 2,678 children. There was eight times anophthalmus, four times mikrophthalmus, and six times coloboma of the iris and choroi-

dea. In the autopsy of two children he examined the eyes and found that there had been been an intra-uterine inflammatory process in the eye fissure, which caused an interruption in the development of the choroidea and iris, and thus produced coloboma. The most important pathological changes in utero involved especially the retina on the entrance of the optic nerve, which were produced by exuberant growths of cells. The inflammatory process had started from this point and it had originated at a time when the eye fissure was not yet closed. Around the optic nerve and inside of the coloboma the inflammatory process had caused a thickening and degeneration of the entire membrane with destruction of the nerve, and ganglion, cellular stratum and of the cells of the pigmented epithelium of the retina. There was furthermore by nutritive interruption a degeneration and partial resorption of the basal filaments of the posterior pole of the lens, but the retina was preserved in the coloboma. The differentiation between the layers is begun as generally known, before the closure of the fœtal retinal fissure. But in this case the inflammation had started before the closure and continued at the closure, producing a folding of the retina and a conglomeration of the accumulating cells of the pigment epithelium. The development of the choroidea was but rudimentary, there being round cells in the place of the choroidea or external layers of non-pigmented spindle cells. It is most probable that this inflammatory process produces sometimes anophthalmus, and the process is evidently a local one, the relation to the maternal parts being not established. In one case, a woman in the fifth month of pregnancy dropped angelica tincture into the right eye instead of a solution of zinc which caused considerable pain and conjunctivitis. The child had mikrophthalmus and coloboma of the iris of the left eye and the microscopical examination showed a closure of the retinal fissure in the seventh week.—*St. Petersburg Medical Wochenscrift.*

DIFFERENTIAL DIAGNOSIS OF LUPUS, LEPRA, AND CANCER IN THE THROAT.

The Spanish physician, Ramon de la Sotay Lastra, gives the following essential points on these diseases: Only a very experi-

enced eye is able to distinguish the frequently occurring forms of lepra, lupus and cancer in the throat. All three have the peculiar form of nodules; all three are liable to become ulcerated. In two, will follow cicatrization, while but in one, there is a probability of a cure.

Lepra is never localized in the throat, and there is always first a disease of the skin. The first appearance in the throat is marked by dark red spots on the mucous membrane of the palate, pharynx and uvula. This redness changes soon to a whitish color, and but a few blood-vessels are visible. The eruptive state is characterized by opaque white nodules, which are soft and at first sensitive, but later removable without pain. On the tongue they appear as papillar ulcerations, on the palate and pharynx in the forms of chains; the uvula having then a rough surface; the epiglottis, ary-epiglottis and the ventricles seem to be encircled by nodules; the inner pharynx has a granulated surface, and the glottis seems to be closed. All the diseased parts swell considerably, the epiglottis looking like an œdematous preputium. The breath is fetid. Finally, after certain intervals, there are formed small confluent ulcers which cover a large part of the tongue, the pharynx, and larynx. They are of a round form, and resemble syphilitic plaques; others are marginated and discolored, the ground being finely granulated. The first appearance of the ulcers is in the palate; then the uvula is attacked and entirely destroyed; the epiglottis, its folds and ary-cartilages are likewise destroyed, and the vocal cords are swollen and hardly movable. At this period there exists a close stenosis, the voice is altered, the breath fetid, and pieces of the larynx are expectorated.

Lupus is liable to appear in the throat without formation of nodules in the skin, but this is seldom. The nodes in the throat are seen as elevated spots without discoloration, and they are of a hard elastic consistence. They grow slowly, and the voice and deglutition are gradually altered, but it takes a long time before granulations are seen. The latter resemble large fissures, and they have red elevated margins. If there is complete formation of scars, the latter are irregular, in some places elevated, in

others depressed, and they contract without deformation of the parts.

Primary Cancer of the throat appears often in old age, in apparently healthy persons. It is marked by congestion and swelling, and there is hardly any pain. But soon there appear nodules, of a grey or red color and of variable size, but which grow slowly and are accompanied with intense pains in the ears and eyes. These nodules change quicker than in lupus to granulating surfaces, covered with thick mucus, which is mixed with blood and pus. There is considerable œdema in the adjacent parts and an abundant secretion of saliva. Here the progress is fatal.—*Revista especial de Sifiliografia y Dermatologia.*

TREATMENT OF DIPHTHERIA WITH THE CYANIDE OF MERCURY.

Dr. Greuholm recommends, among the new remedies for diphtheria, the following solution:

℞—Cyanide of Mercury, - - - 10 centigr.
Peppermint Water, - - - 100 grams.

M. Sig. A teaspoonful every hour.

Dr. Seldéin has used this formula; but was obliged to use a weaker solution on account of nausea, of stomatitis, and of great disgust:

℞—Cyanide of Mercury, . . . 1 centigr.
Water, ... 100 grams.

Add a little honey to correct the taste.

With this remedy he has cured 34 patients out of 37. The patients, if old enough, will gargle the above solution. At the same time is given ice, milk, stimulants (as Hungarian wine), and turpentine.—(*Revue Médicale.*)

THERAPEUTIC ATAXIA OF HYSTERIA.

Huchard has found that certain remedies, such as the iodide of potassium and the salicylate of sodium, are eliminated very slowly in hysteria. He considers this sort of theurapeutic ataxia of hysterics due to three principal causes: To the mental state, to the atony of the digestive organs and to the functional troubles of the kidneys.—*Le Praticien.*

Selections.

SUCCESSIVE DROPSIES OF THE AMNION ALWAYS SPECIFIC. By JAMES DORLAND, M.D., Milwaukee, Wis. Read before the Canada Medical Association, at Kingston, September, 1883.

CASE I.—Mrs. D., aged 30; full habit of body, and apparently healthy. Was called to attend her for the first time, in her fifth confinement, July 16, 1880. Found the os fully dilated, and membranes very tense, and bulging with fluid. Externally, found the abdomen high up, interfering somewhat with respiration, the skin very tight, and palpation giving evidence of a large amount of fluid. Ruptured the membranes, and it was followed by a great gush of water, then the child, and another large quantity of fluid. The amount was between eight and ten quarts, but certainly not less than the former. The fœtus proved to be about seven months old, and had been dead about 24 hours. She said it was not an unusual amount of water, as in all her previous confinements she had about the same quantity. Had been married to a sailor eight years. Could give no reason why so much water would form. The other four children were still-born at four, six and seven months. Had been treated for it at various lake ports, but derived no benefit. Knowing the habits of sailors, I began to look about for a cause, but both of them denied ever having any specific disease. I was not fully convinced, and determined, when she again became pregnant, to put her on specific treatment.

About the 1st of January, 1881, finding her in that condition, I began treatment, and continued it thoroughly until she had passed the seventh month and was well on toward the eighth. At the ninth month, September 3, I delivered her of a 13 lb. girl,

which was perfectly healthy and is alive to-day, and has shown no traces whatever of syphilis. Did not allow the mother to nurse it. There was no dropsy. She again became pregnant, and, satisfied that if she were to blame, the previous vigorous treatment would be sufficient, I only gave her a couple of bottles of medicine.

August 3, 1882, I delivered her of an 11 lb. boy, healthy, and well developed. It has since died, but from no disease connected with syphilis. There was a slight increase of fluid over the former, not amounting to dropsy.

She became pregnant in the following November, but I did not see her until I was called, August 5, 1883, to attend her. She complained of not feeling as well as with the two former, and had felt no life for two days. Upon examination, found dropsy of the amnion, and thought the child would be dead, as I was not certain I could detect the fœtal bruit. About five quarts of water came away, and she was delivered of an 8 lb. girl, which presented marks of syphilis on its hands, feet, and several portions of the body. She now admitted having had some sores, but stated they were after marriage. The child was alive, and was at once put on specific treatment.

CASE II.—Mrs. P., aged 25, of short stature, but well developed; married to her second husband; the mother of one boy by her first, aged 15, strong and healthy. Had six children by her present husband, all born dead, or died shortly after, within three or four weeks. I saw the last one November 1, 1880; it was about three weeks old, and had well marked syphilis, and died about three days after. Both parents strenuously denied ever having had any specific disease, but the previous history of the mother, and the loose character of the husband, led me to suspect him as the culprit. With all her children by the last husband, there had been an abundance of water, and the midwife said some of them had been drowned. When she again became pregnant, I put her on specific treatment, and delivered her, October 4, 1881, of a 9 lb. girl, and at full time, alive, with no traces of syphilis, and about the ordinary quantity of liquor amnii. Did not allow her to suckle it. The child is still alive, and healthy.

A short time after, she became pregnant, and, not believing what was told her, refused to take specific treatment. When labor came on, was sent for; found the os fully dilated, a large bag of water protruding into the vagina, and the abdomen very tense. Ruptured the membranes, and succeeded in collecting 10 quarts of water. The child was dead. The delivery was August 10, 1882. In November she again became pregnant, and took medicine as directed, and on August 11, 1883, I delivered her of a fine healthy child, without any dropsy. She had felt much better than when carrying her previous child.

CASE III.—Mrs. H., aged 25; spare habit of body, but wiry; the mother of four children. The first two only lived a few weeks after birth. I did not attend her with either of them. Had treated the father for syphilis. She stated that when they were born a great quantity of water came away; supposed that was natural, until after her next was born. The midwife stated there were about six or seven quarts of fluid. With her third and fourth I attended her, and kept her on specific treatment during gestation. They were both fine healthy children, but one of them has since died from convulsions. At neither of her last confinements was there any undue collection of fluid. The father had also, in the meantime, taken a further specific course.

CASE IV.—Mrs. H., aged 17; married at 14; of short stature, but strong and healthy; the mother of three children, two of them being now dead. Had treated her husband for syphilis before marriage, but he did not take a very thorough course. When pregnant with her first child, advised specific treatment, but they would not listen to it.

August 22, 1881, delivered her of a seven months' fœtus, which was dead. The cord was only 8 inches long. On rupturing the membranes, about seven quarts of water came away. The child had only been dead a few hours, probably since she had a chill. She soon became pregnant again, but still persisted in not taking any medicine.

July 16, 1882, was called; found the membranes ruptured, and about half the liquor amnii in a pail. It measured six quarts. When the water flowed freely, she would get up and go to the pail, and wait until the pain was over. I do not think it

any exaggeration to state that as much was lost on the bed-clothes and floor. When the child was born, about another quart came away, making 12 or 13 quarts altogether. Contrary to my expectations, the child was alive, and lived two weeks before death, presenting the characteristic old man appearance of syphilis.

When she again became pregnant, consented to take medicine, and it was pushed thoroughly. About ten days before labor she began to enlarge quite fast, and upon examination, found more fluid than normal. Had stopped all treatment for about three weeks previous; now, however, I again began giving potassium iodide 5i per day, which acted on the bowels quite freely. I continued it until the birth of the child. About the fifth day after taking the pot. iod. the movements of the child became stronger, and the tenseness gave way.

July 6, 1883, I delivered her of a 10 lb. boy, with only slight traces of syphilis, and no undue amount of fluid.

CASE V.—Mrs. S., aged 41; short and robust; the mother of nine children. The first was born in Scotland, the second in England, five in Greece, the eighth in England, and the ninth in the United States. Generally noticed that she began to enlarge quite rapidly a fortnight or six weeks before the birth of her children. First child still-born, with an immense quantity of fluid; fifth, a large amount, but the child was alive, and died two weeks after; eighth child only lived 20 minutes, and she thought the death was due to too much fluid. I was called to attend her with the ninth; found the os fully dilated. I ruptured the membranes and collected six quarts of water; not more than a pint escaped. The child, a male, weighed 13 lbs., and died 15 minutes after birth. The cord was 12 inches long, and fully an inch in diameter. She was confined March 23, 1883. Could get no specific history from either parent.

CASE VI.—Mrs. W., aged 38; spare habit of body; the mother of five healthy children by her first husband. Her second one had three by his first wife, all healthy. He contracted syphilis, and gave it to this one. They paid very little attention to medicines prescribed; only when some external manifestations were present, and painful, they would use some local application

until relieved. During this time, which was in 1881, she became pregnant, and, contrary to advice, stopped treatment. At the eighth month she had some severe pains, and sent for me. Upon examination, found the os dilated so as to admit the tip of the finger. The membranes were as tense as they should be during a severe pain. A great change had taken place in her abdomen, it being enormously distended. It was symmetrical, and pushed up the diaphragm so that respiration was very much interfered with. Expression anxious. Said the skin felt as though it would burst. Gave her an anodyne. The following day she had a chill, and four days after, labor came on. I arrived a few minutes after the membranes had ruptured, and found the bedding and carpet saturated with water. The patient was in an anxious frame of mind; felt sure death was approaching, as, to use her own words, she had collapsed. Said she had passed fully 24 quarts of water, a great gush following and during a second pain. I soon delivered her of a still-born child. At the lowest calculation, there could not have been less than 20 quarts, and I firmly believe, could it have been collected, it would have reached 30, for I have never seen such a flood in a parturient chamber.

REMARKS.

CASE I.—This patient, after having five still-births, all with dropsy, was able to have, after one thorough course, three children in succession, all born alive—the first two without dropsy, and without any sign of syphilis; the last with dropsy and a showing of syphilis, but still alive, and with fair prospects of living. But the last case also shows that some of the effect produced by specific treatment is beginning to wear off. After this last one, I received my first intimation from her that she had ever been diseased, but I had long since found out I was right from a sister of hers who came to the city later and entered a house of prostitution.

CASE II.—This is also a very valuable one, for here we have six cases of dropsy following in succession, the seventh, under specific treatment, being born without, and perfect in every respect, and free so far from any sign of syphilis. The next, or eighth child, with no treatment whatever, again born with dropsy, and dead. The ninth, after quite a thorough course, was also

born alive, and without dropsy or any sign of syphilis. The husband proved to be the guilty party in this case, and probably that was the reason the first thorough treatment was not sufficient to tide the next one over till full time.

CASE III.—Although I did not see the two children that were born with dropsy of the amnion, the report is perfectly reliable, and I think to the specific course of treatment can be attributed the next two natural births. The father had also, after the birth of the second child, taken further treatment.

CASE IV.—Here we had two cases of dropsy, the husband known to be syphilitic; the third, after the mother had been treated, born alive and with no dropsy, but still with slight traces of syphilis on the palms of the hands and soles of the feet. The father in this case had a very severe attack, and took but little medicine, so that his blood is in a much worse state than any of the others. It is to that I assign the reason of the thorough treatment of the mother not removing every trace of syphilis from the child.

CASE V.—Although not mentioned in my report, all the nine children that were born had dropsy of the amnion, the ones I specified being the most excessive. Although no history from father or mother that would point to syphilis, the condition of the living children, their stunted growth, saw-edged teeth, general appearance, and the illness of one of them, for which no cause was apparent, and which had not yielded to other forms of treatment, and which potassium iodide readily cured, leave scarcely a doubt in my mind but that the father or mother has had syphilis, or is the victim of an inherited taint.

CASE VI.—Although no direct bearing on successive cases, the fact that there could be no doubt as to the cause of the dropsy and the excessive amount of fluid, led me to report the case.

These are the facts I have to lay before you in support of my theory that successive dropsies of the amnion are always specific; facts that cannot be obtained from our lying-in hospitals, but from private practice, where attendance on a family has extended over a number of years, and where you have the time and patience to ferret out the cause of diseases from many who do not care to

have you know their previous misfortunes, or do not inform you for fear of further complications. In hospitals, we seldom see the same patient twice, hence the conclusions arrived at there would be of no use either for or against this theory. That syphilis has caused it, has more than once been advanced, but generally denied, and I think the Germans are the only ones who put much faith in it. That syphilitic children are born without dropsy often happens, for no doubt most of you have seen such cases. These cases of dropsy could not have arisen from any other cause, for there is no history in any of the cases of any inflammation of the amnion, for not one of them suffered from the least bit of pain, but only discomfort, after the fluid had accumulated. Very few of them ever had a chill, and in those the dropsy was present before that time, and the chill only seemed to mark the death of the infant, and not always that. None of them ever had any general anasarca during gestation, and their kidneys always seemed to be fairly active. It could not have been disease of the heart and kidneys of the infant, because some of them were born at such an age, as the one at four months, with about four quarts of fluid, that it would be an utter impossibility; besides, many of them were born alive, and are still alive, and, in most of the cases, even at full term, the dropsy came up in such a short time that the kidneys of no infant could have secreted the amount. I was sorry that I could obtain no post-mortems of the cases I attended, but even had I found hypertrophy of the heart or kidneys, I should have placed no stress upon it, for I do not believe it could cause it, nor that we have any facts that point in that direction. The death of the fœtus and osmosis could not have produced it, for the same reason stated above, that many of them were alive, and lived some time after birth. It has seemed to me that it would be impossible to have a dropsy except from systemic infection producing changes in the amnion, or following a debilitating disease, as latent pleurisy often does; but that all these cases were in good health shows that it was not due to the latter, but to a poison which can lurk for years in the system, and, as far as outward signs go, give no evidence of its presence. Such a poison is syphilis, and I believe that if not the only cause, it is the one *par excellence*, and the only cause of successive cases.

Cases 1 and 2 would, I think, have been sufficient for my purpose, but the others were added because in unity there is strength. These cases all happened in mothers who spent many hours in grief because of the loss of their children and their inability to have them born alive; and if to any such among your patients relief is brought, I shall feel amply repaid.—*Canada Medical and Surgical Journal.*

A SUCCESSFUL INJECTION OF A SOLUTION OF SALT IN ACUTE ANÆMIA.

The death in hæmorrhage is not directly caused by the loss of blood, but by the immobility of the remaining blood corpuscles. If a fluid is injected into the vessels and thus the tonus of the vessels restored, the individual will recover. It has been proved by Ott that in very severe hæmorrhages the number of red blood corpuscles and the quantity of albumen was normal a few weeks after an injection of salt solution. The following case will prove the truth of this theory. A woman who had been delivered from placenta prævia with severe hæmorrhage was found moribund and without radial pulse. An injection of one and a half liters of a 6 per cent. solution of salt with three drops of a solution of caustic soda was made into the vena mediana. After three minutes the radial pulse was perceptible, and the patient made a deep respiration. After five days the woman was comfortable. The injection has to be made into a vein, as the veins can easily be detected in an anæmic person, and as there has been gangrene after injection into an artery.

TREATMENT OF POLYURIA.

℞—Pure glycerine.....30 grams.
Citric or tartaric acid..2 grams.
Water.....500 grams.

M. Sig. a tablespoonful (or two) every hour. Under the influence of this treatment the urea emitted in 24 hours diminishes 6 to 7 grams.—*Revue Thérap. Medico-chirurgicale.*

Obituary.

JAMES MARION SIMS, M.D.

The death of Dr. J. Marion Sims carries profound grief to the American profession. Not only in this country, but in whatever land true medicine lives, his departure will be mourned, for his fame and the influence of his teaching were almost world-wide. Sitting in the darkness of this sudden and great sorrow, it is natural to consider the work that he did in his busy life.

As there are epochs in the history of medicine with which famous names are associated, so there are famous names belonging to the special departments of medicine,—names of those who have founded or greatly advanced those special departments. As the circulation of the blood suggests the name of Harvey, or pathological anatomy that of Morgagni, or obstetric anæsthesia that of Simpson; as vaccination always brings up the name of Jenner, or auscultation that of Laennec,—so does gynæcology suggest that of Marion Sims; patient, brave, of restless activity; a triumphant, a noble man. He was a bold pioneer, opening new pathways; original and with creative genius, he discovered for himself, and made his discoveries a gift to the profession. Even when unconsciously repeating what had been done before him, he greatly enriched the discovery and carried the advance far beyond any predecessor. No matter what may be the great glory of those who have followed his footsteps, the best of them feel that they would never have accomplished what they have, had he not shown the way.

It is needless to say that before he faithfully worked out a method, the curing of genito-urinary fistulae in the female was a

rare exception, and now, thanks to his patient, self-denying labors, it is the rule. The best method of making uterine examinations he discovered and taught. He has done more than any man of his generation to teach not only the diagnosis, but also the most important surgical therapeutics of uterine diseases. Going to New York after many a hard lesson, after working out many a difficult problem unaided in his Southern home, and thus made strong in self-reliance, he gave an impetus to the study of the diseases of women which must be felt long after his body mingles with kindred earth. The Women's Hospital of New York, which owes its foundation to him, has been a school of the most valuable instruction to the profession; and that hospital has led to the establishment of similar institutions in various parts of the country, blessing them who are relieved in each, and blessing the profession, to whom they have been great centers of light. His treatise upon uterine surgery is one of the master-pieces of medical literature of the country. It has been translated into several foreign languages, and is found wherever there are educated physicians.

It would require much space to give even a list of the instruments Dr. Sims has invented for the diagnosis or treatment of uterine diseases. Many of these are found in the consulting rooms of all gynæcologists, and in all hospitals where the diseases of women are treated. If to-day all the publications of his pen and all the instruments of his device were destroyed, a great blank in gynæcological science and art would be made,—a blank that would remain for years.

He was a man constantly trying to add to his knowledge in his special department, and how cheerful and helpful to all who sought his advice! Of great personal magnetism, he was an inspiration to all brought in contact with him. But his inspiring power was stronger, wider than this—it was far-reaching, long-lasting, so that men who never saw him, felt his influence, and were quickened through all their lives by his example and printed words; hearts as well as heads acknowledged his power.

Marion Sims, in many respects the greatest gynæcologist of the century, has passed away, but he has left an undying fame. —*Medical News*, Nov. 17, 1883.

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ARTICLE I.

CLINICAL AND PATHOLOGICAL REPORTS OF CASES OF INSANITY. By S. V. CLEVENGER, M.D., Special Pathologist Cook County Insane Asylum.

Three hundred and thirty-seven males, and three hundred and ninety-seven females, together, seven hundred and thirty-four, insane persons have been under observation at this hospital since May, 1883. Of this number five hundred and fifty-four are present at the close of the calendar year, December 31, 1883.

During these past seven months the histories of nearly three-fourths of the patients have been collected in large volumes, and every available source of information ransacked, main reliance being placed upon narrations of relatives and physicians who previously attended the cases; but it sometimes happens that either no friends of the lunatic call, or that nothing can be elic-

ited from them through their stupidity or unwillingness to impart information from various motives. This, fortunately, is not usual. Useful clues are afforded by the stenographer's reports of the trials on file at the county agent's office. About half the patients themselves are able to give, with more or less reliability, an account of their past lives, and from the remainder, except in cases of dementia, occasionally something can be learned also. The attendants soon learn the peculiarities of those intrusted to their care, and report to the physicians on their rounds, or at once if necessary.

The strictly medical duties of the physicians are multifarious enough for a corps of specialists. Surgery, ophthalmology, otology, dermatology, gynæcology, and rarely obstetric aid are called into requisition.

Where an autopsy is justified by the history of the case and *intra viam* observation, all departures from the normal are carefully noted, whether occurring in the brain or trunk viscera. The former is placed in a solution of kali bichromas, often changed, and tben transferred to methyl, and finally ethyl alcohol. This prevents the precipitation of the phosphorized and nitrogenous constituents of the brain, and ensures an equable hardening. The ventricles must first be injected and the fissures separated to permit access of the fluids. By the second or third month, if the pia can be separated with the forceps, sections may be cut. In the laboratory, a modification of Gudden's water microtome is used, which I described and exhibited at the last meeting of the American Microscopical Society. Sections of one-thousandth of an inch are floated off and boiled in a water bath with a carmine solution for about two hours, then washed and treated with a little glacial acetic acid, washed in filtered water and transferred to alcohol, and finally to clove oil till clear. Mountings are made in Canada balsam or glycerine jelly, and the slides forwarded to physicians interested in the study of the pathology of insanity.

From time to time cases illustrative of the various phases of mental disease and their treatment will be published in this journal, such matters as are of interest only to specialists being pro-

duced in the *Journal of Neurology and Psychiatry, Alienist and Neurologist, and Journal of Nervous and Mental Disease.*

Female case 275. Delirium grave, published in the *Journal of Neurology and Psychiatry*, August, 1883, was republished in this journal November, 1883.

Female case 238. Paretic dementia, published in the *Alienist and Neurologist*, January, 1884.

Cases of insanity in children from the ages of six to sixteen, published in the *Journal of Neurology and Psychiatry*, November, 1883.

Male case 227. Melancholia from lead poisoning. John H., aged 51, Swede, single, admitted June 7, 1883, presented the appearance of apathy and mutism observable in ordinary melancholia, with the addition of epileptiform convulsions. A friend visited him, and from him it was learned that the patient had been working in a lead factory on State street for three years. An examination revealed the characteristic blue discoloration of the gums and other symptoms of lead poisoning. He was given iodide of potassium, tonics and bathed frequently. He steadily improved, and was discharged fully recovered August 31, 1883.

Sanitary boards would do well to examine into the conduct of lead factories, and insist upon proper measures being adopted to protect workmen against plumbic toxæmia. Had the cause of this attack been unascertained, the patient would have died insane.

Male case 250. Monomania. R. D., admitted July 12, 1883; age, 32; Scotch; book-keeper; single. We were somewhat surprised to see this gentlemanly-looking fellow standing in the main hall the day of his admission, among others committed to the asylum. He spoke so intelligently, with a slightly dejected air, we concluded to make him comfortable first, and next day get his story from him. Dr. Thuemmler informed me that he had obtained the first volume of it next morning, and we should go together to hear the remainder. I told the patient that Dr. T. had detailed all that had been told him, and to proceed where he left off. The thousand and one nights' tales of Scheherazade were nothing to it in length, nor could Mark Twain's ram story equal it in digression. The substance of it was that he was an honest,

good fellow, who by too much religious zeal, laboring hard to become a sermonizer in the Methodist church, ignoring completely physiological demands, came to have a mature bee in his bonnet. He sent missives of love to a lady in the congregation, who rejected his suit. This he took greatly to heart. A certain Rev. J. T. Inman, Station D, New York, insisted upon spending several thousand dollars in advertising how to cure the errors of youth, merely to annoy our patient. Wherever he went that horrible advertisement appeared, and finally stared him in the face from his native village paper in Scotland.

He went back to Montreal, and several clergyman began throwing out insinuations against his purity, in their sermons. He came to Chicago, and between Inman's advertisement and the Methodist clergymen all preaching at him, he became disgusted and went to London. There he committed the horrible crime of having an involuntary seminal ejaculation, upon seeing two good looking young ladies in the same stage with him. He had the location near Hyde Park entrance, the number of the omnibus, and the minute and hour it occurred, as exact as the recording angel could have had it. He shipped immediately for the Indian archipelago with a bluff old sea captain, who constantly insinuated that our patient was not as pure as he might be. Thence he went to Cape Town, South Africa, where he was engaged by a book-dealer, who fancied him greatly, and with whom he would have done well had it not been for the appearance of that cursed Inman advertisement in the colony paper. He even saw it in Boerish Dutch, He fled back to America, and even began to dislike going to church (another high crime which he bewailed) because of the still more direct preaching at him he encountered everywhere. Even the published sermons alluded to him. On a lake vessel the purser lost some money from his office. Forthwith our patient knew *he* was suspected of having stolen it, and now the police became the objects of his hatred. They passed his room window singly and by twos all day and night, and from what scraps of conversation he could overhear, he knew they talked only of him and his probable theft. He came to Chicago, and noticed how the police followed him and eyed him askance, and finally one policeman had the impertinence to get upon the same street

car he did. Outraged nature could bear no more. He knocked the city guardian into the gutter, and was promptly arrested. He told his tale of persecution, and was brought here.

In July, 1883, a slight pneumonia attack laid him up for awhile, and upon his recovery I took him into my office, where he worked faithfully on statistics and medical records till his discharge, August 24, 1883. By regulating his habits, and with the use of tonics, he improved rapidly. I selected books for him, and by means of long conversations tried to improve his mental background until he acknowledged his delusion, and as I bade him good-bye on the train he told me all he feared was a return of the delusions in some new form. This was a good indication of mentality coming to his rescue, and I told him his only hope was self-education, a cultivation of his reasoning powers, and holding in check emotionalism of all kinds. He wrote to me from Montreal that he was about to embark for Scotland, his home, and that he was quite well. The September following he sent me an article he had written for a Scotch newspaper.

He had been treated some years before by Dr. Yellowlees, the famous Scotch alienist, for melancholia, a condition his evident monomania simulated in the last attack through the depression his vagaries engendered. It must not be forgotten that a monomaniac may, by reason of his delusions, be depressed, and that a melancholy person who *reasons* in a perverted way upon the cause of his delusions is a monomaniac, and not a melancholiac. A term which would express logical perversion would best suit this malady, as a monomaniac may have a dozen delusions, though he usually has one prominent at a time about which he is always ready to argue. This case is instructive in the mentality possessed by the patient, which could be appealed to for his future good. He read works on his disorder intelligently, and recognized the fact that his mind was disordered, and even called my attention to descriptions fitting his case, There are instances of patients hiding their delusions for the purpose of gaining freedom, but he did nothing of the kind; his frankness and dread lest the errors should return were good guarantees of his recovery. Torpidity of the bowels and sluggish circulation from which he suffered upon his arrival were corrected by strychnia.

Male Case 188. Mania. Joseph C., admitted March 28, 1883; aged 24; Bohemian; shoemaker; married. The *furor maniacorum* in this case was intense, and would come on without warning, When sitting or standing in the grounds with other patients an outbreak of maniacal rage would seize him, and often six attendants were necessary to control him. Was crafty and agile. Escaped in June, 1883, by bolting through door; ran up ladder to roof and danced over the slates and chimneys at its dizzy height with a strait-jacket on. He was baited with a plug of tobacco; as he attempted to take it with his teeth his feet were pinioned. Dr. Theummler has found great benefit to accrue from the use of Squibbs' fl. ext. conium in this case, ten minim doses *ter in die*. When his dose was missed he became violent again. August, 1883, apparently recovered, but as once before he had a remission of two weeks he is detained under observation a few weeks longer. Is now quiet, industrious and rational. He blames his insanity upon something he drank in a restaurant, but doubtless with little reason. Discharged apparently fully recovered September 24, 1883.

Male Case 56. Mania from traumatism. Patrick K., admitted Nov. 1, 1878, aged 44: Irish; policeman. Has grandiose delusions and others which partake of his former police duties. For instance, in the winter of 1880 I sat beside him to examine him, when he addressed himself and suspicions to Dr. Spray, the superintendent. He insisted that the superintendent had some plot concerning us. He was shot in the neck by a burglar at the Halsted-street bridge October 30, 1874. He had been on the force for ten years. Dr. H. M. Bannister published this case in the *Journal of Nervous and Mental Disease*, p. 434, July, 1879, as insanity resulting from a wound of the cervical sympathetic. The scar is just anterior to left sterno-cleido-mastoid muscle two inches above its insertion. He is extremely suspicious and abusive, but otherwise harmless. There are no traces now of the flushing which Dr. B. noticed on the left side of the face. Incurable.

Male case 218. Paretic Dementia. P. M., admitted May 22, 1883, age 40; Norway; physician; single. A classmate of the patient stated that he had decided paretic symptoms two years

ago; hesitancy of speech, grand delusions and amnesic periods, and that he had been arrested and fined repeatedly for publicly urinating in the streets. He attacked a saloon keeper fiercely and was brought here. He several times micturated against wall of ward and denied all knowledge of such acts when accused of them. Having great strength he broke a corridor door through in an attempt at escape, but calmed down when reasoned with and convinced that he had been tried by jury and found guilty of being insane (so we may construe the operation of our State laws). His delusions of grandeur were intellectual; says he was four years assistant physician in the Christiania asylum, which is quite probable; fancies himself a great gynæcologist; occasionally imagines himself very wealthy. He stood well in medical circles, and really was a good surgeon, but while here showed little interest in anything beyond his meals and the trivialities of his surroundings. Occasional attacks of furor were followed by epileptiform convulsions. An aunt on mother's side had an indefinite mental complaint showing probable heredity predisposition. When he spoke his face would suffuse with blood, this capillary flushing patient stated was inherited. He succumbed to an attack of typhoid pneumonia September 10, 1883. Autopsy ten hours after death: Scalp thick, and more than ordinary quantity of blood oozed, or rather, ran from incisions. Skull very thick and dense, opened with difficulty. Left cerebrum præ-frontal region large extravasations, imparting a scarlet flush, extended from base to first frontal fissure and to operculum nearly to sulcus of Rolando. Leucocytic exudation general, adhesions of dura to brain in region of superior longitudinal sinus, summit of dura full of hæmatoidin crystals. One pacchionian body on left side just anterior to sulcus Rolando. Occipital region capillary stasis great. but relatively less than in frontal and parietal region. Small arterial rupture near pons, base of temporal region. Right cerebrum venous stasis on summit more marked than on left, a general flush about one inch anterior to præcentral sulcus extending backward, not involving the temporal lobe more than occipital. Isthmus extremely large. Pons bowed out unusually (normal for this brain). Total brain weight 57 ounces.

Sections microscopically examined showed the usual evidences of paretic dementia, such as thromboses, kinked, distorted blood-vessels with perivascular channels (now established as pathological not physiological). The vascular fluctuations observed in his face during life were similarly occurring in his brain, with the addition of ruptures and tortuosities due to feebler support of contiguous tissue. Intemperance was an element in his case, but whether causative of or consequent upon his insanity, certainly it was an aggravating factor.

Male Case 247. Epileptic Insanity. F. S., admitted July 5, 1883, aged 6 years—youngest case on record in this asylum. American. Epileptic since one year old. Maniacal; restless; fights and cries when opposed or taken hold of. Does not speak. Habits filthy, mischievous. Notices very little, but attention attracted by noises. Health and physique otherwise good. Mother appears indifferently balanced. Under kali bromidum quieted down rapidly, and was taken home 3 days after admission, improved but seeming dazed. The child had evidently had no proper treatment previously.

Male Case 260. Epileptic Insanity. A. M., admitted July 26, 1883. American. Aged 24 years. Hostler. Single. Epileptic 6 years. Often one paroxysm in 3 or 4 weeks, and, if excited, 2 or 3 daily. Body spotted with tricophytosis corporis. Mother, brother, and sister scrofulous. Amnesic. Aura starts with whirring noise in head. Hallucinations of hearing. Repeats the same sentence over many times, but otherwise apparently sane. Was industrious and peaceable till December 14, 1883, when, after several severe epileptic attacks, he grew violent and struck an attendant, exhibited extreme restlessness, turning round often, lapsed into stupidity, alternately with fits, 2 or 3 daily; but by the last of December is improving.

Male Case 214. Katatonia. F. S., admitted September 25, 1879. Age 39. German. Laborer. Married. Apparently demented on arrival. Emaciated, with muscular rigidity. No hereditary history of mental disease. Father died of phthisis pulm. Mother living and aged. Up to June 25, 1879, had been at work, but developed delusions of persecution—thought his associates wanted to kill him—suddenly refused to speak

or eat; saliva oozed from his mouth. Pulse 120. Has to be fed. October 10, spoke rationally. Says he remembers everything that transpired during his demented state; that he feels well and happy now, but that he had painful delusions and heard a voice telling him he must keep silent for several days. October 22, became suddenly cataleptic, stupid, and nearly in same condition as when admitted. Bowels atonic, enemata necessary. October 28, improving gradually until rational again by November 25. Mentioned the imperative voice again, as having controlled his actions, warning him against moving a single joint. The condition is not catalepsy, but a cataleptoidal one which could be overcome entirely were volition not dominated by hallucinations. January 15, 1880, maniacal furor great. January 24, says he is God. February 8, still violent. February 18, improved gradually till taken home, July 11, 1880. [The foregoing observations were made by Dr. A. W. Hagenbach, the assistant physician.] Re-admitted January 13, 1881, since when the cyclical character of his attacks were pretty much as above—melancholic, cataleptoidal conditions and mania, December 31, 1883, passing into the cataleptoidal state, preceded by quiet for 3 months. His mind is weaker than formerly, but his bodily condition is better, having grown stouter.

Article II.

My Experience With Jequirity in the Treatment of Granular Eyelids. By F. C. Hotz, M.D., Chicago. Read before the Chicago Medical Society, December 3, 1883.

A little over a year ago Dr. Wecker, of Paris, to whom ophthalmology is indebted for the introduction of several valuable and useful remedies, announced the discovery of a remedy which seemed to possess a healing power surpassing anything heretofore used in the treatment of granular conjunctivitis. He introduced the remedy under the odd term "jequirity," which is only another name for what in this country is popularly known as sea beans, or "crab eyes," though these red, egg-shaped peas

which you see here, grow neither in the sea nor in crabs, but are the seeds of a South American plant, *abrus precatorius* (also known as "wild liquorice," and by half a dozen other names).

Among the natives of Brazil these peas had long enjoyed a great popularity as a good remedy for inflamed eyes, and the discovery of their important medicinal properties by Dr. Wecker was the result of a mere accident. A Brazilian gentleman, who at different times had been a patient of Dr. Wecker's but never been fully relieved of the trachoma of his eyelids, was induced to try the popular home remedy. The quick and complete relief he experienced after its use of course gave him a very high opinion of the remedy, and being of a sympathetic nature probably he pitied the multitude of sufferers whom he saw wandering in the streets of the European capitals from oculist to oculist and from one hospital to another seeking, but never finding a permanent relief for the granulated eyelids. So this gentleman sent a package of sea beans to Dr. Wecker with a full description of the manner the natives use them, and with an urgent request to try them, giving his own case as a reference for their efficiency.

Dr. Wecker complied with this request, following at first strictly the directions of the natives, who prepared a weak infusion (0.3 per cent.) with which they bathe the eyes three times per day for three consecutive days; then he proceeded to test the effect of infusions of various strength, increasing it to 2, 3 and 5 per cent.* His experiments soon convinced the doctor of these facts:

1. That jequirity has a most remarkable effect upon the conjunctiva, producing a peculiar, violent, acute inflammation.

2. That the severity of this inflammation can be graded by the strength of the infusion and the number of applications.

3. That this jequirity conjunctivitis involves no danger to the eye, and

4. That it cures the granulations and clears the vascular corneæ quickly and thoroughly.

* His prescription for the 5 per cent. infusion is as follows: Take 10 grams of the skinned seeds, pulverize (not only crush) them well; add 50 grams of cold water, leave it stand twenty-four hours, then filter before using. I have recently found that the infusion is just as effective if the seeds have been macerated only ten minutes

That such statements, coming from such a source, should attract a good deal of attention among oculists, was very natural, considering the present state of our therapy for granular eyelids. With the most approved methods the treatment is slow, tedious, and uncertain of its success. No wonder that Dr. Wecker's accounts of his remarkably quick cures by a few applications of jequirity were read by many with a great deal of skepticism. And I confess I belonged to the skeptical class until last summer, when Dr. Gruening, of New York, showed me in a number of of cases so marvellous results, and spoke so warmly for the remedy that I became greatly interested, and resolved to test it. The material for these tests was found in abundance at the Eye and Ear Infirmary; for, being a State institution, it receives the poor patients from all parts of the State of Illinois, and therefore among its inmates there is always a great number of patients afflicted with granular ophthalmia in its various forms and phases, from the fresh acute attack to the old chronic form, with atrophy of the conjunctiva, entropium, ulceration and vascularization of the cornea.* Assured that the jequirity treatment does not injure the eye, I thought the experiment was a legitimate one and, worth the trial, inasmuch as a quick recovery would be a great blessing to those poor patients and a financial gain for the State.

I began my experiments in July. At first a 2-per-cent. infusion was used twice or three times daily for two or three days, according to the severity of the reaction produced. Later on (after I had read Dr. Wecker's paper in the July number of the *Klin. Monatsblötter*, where he recommended the 5-per-cent. infusion) the strength of the infusion was increased to 5 per cent., but the number of applications reduced to one per day, and with this stronger lotion two applications (and in a few cases even one) were sufficient to produce the typical jequirity inflammation. The infusion was applied upon the conjunctiva of the everted eyelids by means of a camel's-hair brush.

The application itself was always entirely painless, and not till six or eight hours later did the patient begin to feel the action of

* For instance, among the 393 house patients of the Eye department admitted during the year ending September 30, 1883, there were 115 cases of granular lids with and without pannus.

the medicine, by pain and irritation of his eyes. After twenty-four hours there always was already more or less œdema of the eyelids, much redness and swelling of the conjunctiva, discharge of a muco-purulent character, and the patient complained of considerable pain and great tenderness of the eye. Under these circumstances the everting of the upper lids for making the second application of the medicine was very difficult and painful, but the medicine itself, also then, caused no pain. The night following the second application was the worst time for the patient. He suffered agonies of pain and walked the floor unless given a large dose of an opiate, and in sensitive persons the violent local inflammation reacted upon the whole system, causing fever and general malaise. The swelling of the eyelids attained such enormous dimensions, that eyelashes and lid-borders were completely invisible, and that it became exceedingly difficult to open the eye. The tarsal and retro-tarsal conjunctiva was covered with a thick white coat of a croupous exudation; the ocular conjunctiva was very red and swollen, so that it projected far over the margin of the cornea. The cornea always showed remarkable changes: where it had been vascular and hazy before the treatment, it was more so now, and where it had been transparent before, it became dull, lusterless, and gray.

Those symptoms of the fully developed jequirity ophthalmia are frightful, indeed, and may fill the mind with anxiety for the safety of the eye; and time and again have physicians, when looking at such an eye, betrayed, either by the expression of their faces or by remarks, that they entertained serious doubts regarding the harmlessness of the treatment, any assurances to this effect notwithstanding. But if this condition of the eye can alarm the physician, how must it frighten the patient if he was not prepared for it. I have, therefore, told every patient, before I applied the remedy, that it would inflame his eyes very badly, and that he would suffer considerably for one day; but at the same time I gave him the firm assurance that there was not the least danger, that his eye would safely get over the inflammation in a few days, and then quickly get well. I made it a rule to give this information and explanation in every case, and I have good reasons for being satisfied with having done so, and I would

recommend this rule to every one who wishes to use jequirity. It has a wonderful, strengthening effect upon the faith and moral courage of the patient, when he hears his physician speak of the direct effect and the ultimate result of the proposed treatment in such precise and positive terms, and his faith in your medical experience will become unbounded when he finds afterwards that everything passed off exactly as you predicted.

When the typical effect of the jequirity, the croupous-blennorhœal ophthalmia, was obtained, the remedy was discontinued. The patient remained in his room for two or three days, bathing his eyes frequently with water to remove the discharge. When the pain was unusually severe and the swelling excessive, ice-cold compresses were applied during the day, and opiates given at night. Pain and swelling, however, subsided always very quickly, the pain seldom lasting more than 24 hours; and two days after the last treatment the œdema of the eyelids had usually pretty well disappeared. The croupous exudation was then thrown off, and within one week the eye had recovered from the immediate effect of the jequirity treatment.

During this time already, but more so in the second and third weeks, the wonderful effect of jequirity upon the granulations of the conjunctiva and the pannus of the cornea became manifest. In the successful cases, at the end of the third week, the conjunctiva was as nearly normal as this was possible under the circumstances; or, in other words, the few treatments thoroughly eradicated the granulations, and removed all thickening and roughness of the conjunctiva; but, of course, they could not remove atrophic patches and cicatrices previously produced in the conjunctiva by the disease.

The action of jequirity seemed equally effective whether enlarged papillœ or lymph follicles constituted the predominant feature of the granular disease. I paid especial attention to this point, but failed to discover any marked difference; the most cases of the papillary type were cursed by the first jequiritization, a few required a second course of the same treatment; but the same can be said of the follicular and of the mixed forms. Only one case (Grimm) with well developed granulations (papillary form) was not benefitted by the treatment, though it produced

a very severe and typical jequirity ophthalmia. But I am inclined to attribute this failure to the fact that at the time of jequiritization the eyes were in the state of acute inflammation, a very severe acute relapse of inflammation just having attacked the lids and the cornea. We know that acute granular conjunctivitis and acute keratitis (pannus) do not tolerate the application of stimulants or irritants. This has been the universal experience with all the various modes of treatment heretofore, and I believe jequirity will prove no exception to this rule. In the case referred to it affirmed the rule; for it decidedly intensified and prolonged the acute inflammation. After this experience I have always subdued every symptoms of acute inflammation by the frequent use of ice water compresses before the jequirity was applied, and I have not had another failure since.

There is another class of cases which received no benefit from jequirity. But they really do not belong to the class of granular eyelids; they are a peculiar form of catarrhal conjunctivitis, its peculiar feature being this: That the inflammation affects chiefly the retro-tarsal portion of the conjunctiva. This portion is infiltrated, swollen, succulent and sometimes thickly studded with lymph-follicles, while the tarsal conjunctiva is smooth and thin showing perhaps only a few isolated small follicles. I treated three cases of this kind with jequirity, and none were materially benefitted by the treatment.

Now, what was the effect of jequiritization on the cornea? In the first place, I will say, that my experience fully agrees with Dr. Wecker's in this important fact, to-wit: That in no case the cornea received the least injury or damage from the effect of jequirity. It was used upon eyes with normal cornæ as well as upon eyes with ulcerations, pannus, leucoma of the cornea; but not in one single instance have I noticed any ill effect. During the acme of jequirity ophthalmia, it is true, the cornea became gray and dull, but with the subsidence of the inflammation it always recovered its normal transparency and bright lustre. Corneal ulcers neither got any worse nor was their repair materially promoted by jequirity.

Non-vascular opacities of the cornea (leucoma) were not affected at all. But most remarkable was the effect upon the

vascular opacities (pannus) of the cornea. I saw the densest pannus which had reduced the sight to the bare perception of light (just about as much as you can see through your closed eyelids) clear away within two weeks so much that the patient could easily walk alone and decipher large type. And this result was obtained in cases which, for many months past, had shown no sign of improvement, though no remedy was left untried save the operation of peritomy and the inoculation of blennorrhœa. And, indeed, it seemed to me that these cases of inveterate pannus, which resisted all other medicines, yielded the best results; here the jequirity accomplished wonderful changes and showed its virtues in the most brilliant light. The first favorable sign, I always noticed, was the brighter luster of the cornea; then the blood vessels on its surface became thinner and receded gradually from the center to the margin, while the epithelial layers of the cornea became visibly clearer.

So successful was the effect of the jequirity upon the cornea that only in three eyes out of thirty-six it failed to remove the pannus. In one eye the conjunctiva was so atrophied that the 5-per-cent. lotion of jequirity could not produce any inflammation, though it was used every day during a whole week. The other two eyes were those of that patient (Grimm) mentioned above, which were treated while in the state of acute inflammation.

Summing up my experience gathered from the study of 65 eyes (50 in the Eye and Ear Infirmary, 15 in private practice) which I treated with jequirity from July to November, I can express it in the following propositions:

1, Jequirity is the best known remedy for the chronic granular conjunctivitis.

2. It is the most effective remedy for the clearing of trachomatous pannus, and in inveterate forms of pannus it is preferable to peritomy, as well as to the inoculation of blennorrhœal virus, because it does its work quicker than the operation, and safer than the inoculation.

3. It has no injurious effect upon the eye, and can be used with perfect safety, even when the cornea is ulcerated.

4. But it should not be used while the cornea and conjunctiva are acutely inflamed.

5. It does not benefit those cases of chronic conjunctivitis in which the symptoms of catarrh (increased secretion, succulence of the retro-tarsal folds, etc.) predominate over those of trachoma (enlarged papillæ, and lymph follicles, plastic infiltration of tarsal conjunctiva).

6. The most violent attacks of jequirity ophthalmia accomplish the speediest cures of granulated eyelids and the quickest clearing up of the vascular cornea.

ARTICLE III.

EMETICS, OR BRISK CATHARTICS IN STRUMOUS OPHTHALMIA.

By R. F. HENRY, M.D., Princeville, Illinois.

About ten years since, I treated a case of strumous ophthalmia or phlyctenular keratitis, for several weeks without giving any permanent relief to the suffering child. I consulted the best authorities I could find and called a reputable specialist who visited and prescribed for the case. Various local applications were made to the eye; mild cathartics were administered; tonics and alteratives, nourishing food, etc., were used, but the case grew worse and worse until I became disheartened and alarmed. I then administered an emetic of ipecacuanha, the good effects of which were manifested in a few hours afterwards.

The photophobia, which was intense, was relieved so that the child could open its eyes in the light. Improvement commenced in the swollen lids and pustular prominences on the cornea, all the bad symptoms rapidly disappeared without any further local treatment, and with the use of tonic doses of quinine and nutritious diet the patient was soon restored to good health, and has never had any return of the disease.

In all the patients I have treated since the above, I have given the emetic when I first visited them, whether it was at the commencement of the disease or at whatever stage; or whether they had been submitted to previous treatment. I have not found it necessary in any of these cases to use any local treatment to the

eye, except rest to the eyelids, exclusion from light, and repeated fomentations with warm water.

I would not hesitate to repeat the emetic if necessary, but all the cases which I have treated since I learned the practice have recovered so rapidly that no repetition was called for. In one case I administered a cathartic of rhubarb and calomel after the emetic had operated, but I am not sure that the case would not have recovered without it. If any one should hesitate to give the emetic on account of any great fear as to its depressing effects I can assure him that in every case in which I have used it, quite the contrary has been the effect, the system rallied in place of being more depressed under the action of the remedy. For suggesting the above treatment I am indebted to the *London Lancet*, vol. 1, No. 2, 1859, in which was published a lecture on strumous ophthalmia delivered in Middlesex Hospital by Mitchell Henry, Esq., F.R.C.S., Surgeon to the Hospital and to the North London Ophthalmic Infirmary. With regard to the name of the disease the lecturer said "it is not happily chosen, for the ocular affection is by no means peculiar to the scrofulous, the worst cases being often free from all glandular affections, strumous abscess, or tubercular deposit; it is true that you will often find it associated with all the hideous features of scrofula, but in many instances the disease is merely the local evidence of constitutional disorder, where there is is no pretense for imputing the strumous diathesis to the sufferer. Why it is that in some young children any irritation of the primæ vicæ is attended with sore eyes, and in others with diarrhœa or stomach cough, or a genuine flux of the bronchial mucous membrane, or not infrequently with convulsions, are secrets belonging to the mysteries of vital peculiarities which are to us at present inexplicable. The fact should, however, at once suggest to us a caution not to treat any of these affections as if they were mere local ones, lest by injudicious applications we convert what are mere symptoms of bodily disorder into genuine obstinate diseases."

"Regarding the disorder as an indication of an acid and foul condition of the primæ viæ—an outward sign of a constitutional disorder—you must proceed to treat it as you would any such complaint in another part of the body." The author then says

that "the first measure must be the administration of an active purgative to clear away that thick and peccant mucus which always occupies the intestines of delicate, ill-nourished children. For this purpose there is nothing like calomel, for, as a purgative, it is often invaluable. It acts strengthening on the delicate glandular structure of the intestines, just as, continued for some time, it acts at last on the salivary glands of the mouth, and produces from them a copious pouring out of saliva. The best combination is calomel, rhubarb and scammony." On children, the lecturer said, "An emetic will often act like a charm, and, for the moment, subdue at once the photophobia and the intolerable itching; but in adults such remedies are not so readily submitted to, and you must be content with purgatives." I cannot, from my limited experience, speak with so much assurance as to the good effects of active cathartics, but the author above quoted said in the same lecture that it was "surprising to see how a child would sometimes pick up and gain in a few days some pounds of weight after the operation of a brisk cathartic. The mucus is cleared away, and the lacteals left free to absorb the chyle with which, for the first time, they come in contact. Never, then, forget to administer an occasional purgative to both old and young when these disorders of mal-assimilation are concerned." As to the results of this treatment which had been practiced by him for six years and by several of his colleagues at the eye infirmary for ten years, he said, "They have been most gratifying; glandular lids, chronic inflammation of the tarsal margins, ingrowing eye-lashes, are almost unknown to us except in cases that have formerly been submitted to the stimulating plan."

In setting so much importance on this remedial measure I do not wish to be understood to undervalue the other means of restoring health, such as diet and regimen, aids in digestion, if necessary, alteratives and tonics, and common-sense local applications. I believe they are all good in their place, and some are indispensable, but I am convinced that they will do more good after the operation of an emetic than they will before.

Article IV.

A Case of Resection of the Elbow-Joint. By W. H. Washburne, M.D., Florence, Wis.

Wm. J. G., a healthy young Irishman, æt. 21 years, recently arrived in this country, and while engaged in operating a horse-power wood-sawing machine, brought his arm in contact with the revolving saw, on December 7, 1882.

Upon examination, it was ascertained that the saw had made a transverse wound upon the posterior aspect of the forearm, about one inch below the point of the elbow.

The ulna was badly shattered from the olecranon process to the extent of about two inches. The radius was divided immediately above the bicipital tuberosity. The ulnar nerve was severed, and all the soft parts badly contused and lacerated, as the saw was not revolving very rapidly. The brachial artery was not injured. There was not any alarming hæmorrhage. The patient reacted well from the shock of the accident.

Two hours after the accident, with the efficient aid and council of my friends Drs. C. A. Fortier and R. W. Odell, resection was performed. The upper three inches of the ulna was removed, together with the head and neck of the radius, the humerus being left intact.

The arm was then placed in a modified Hodgen's splint and elevated from the bed, and carbolized dressings applied (℥i to ℥vi of olive oil).

Inflammatory action of a high degree soon appeared, the part swelled enormously, so that the sutures which brought the edges of the wound into apposition were torn asunder. Dec. 8, the evening pulse and temperature were respectively 112 and $101\frac{4}{5}°$. From this time to Dec. 12, the pulse ranged from 90 to 108, and the temperature from 100 to $101\frac{1}{2}°$. Dec. 12, the patient had a severe chill, followed by a rise of temperature, the thermometer in the mouth indicating $102\frac{1}{2}°$; pulse 108. Nausea and vomiting now commenced, every kind of aliment, and even water, being rejected. A few doses of carbolic acid, gr. $\frac{1}{2}$ in ℥ij of lime-water, relieved these symptoms. He was then put upon quinine in 5 gr. doses, repeated every three hours. The wound was now dis-

charging a large quantity of sanious pus. Dec. 13, temperature reduced to 99½° at 9 A. M.; pulse 86. From Dec. 13 to Dec. 26, temperature ranged from 100° to 102°; the quinine continued in smaller doses. The wound still dressed with carbolized olive oil (℥iij to Oj). Abscesses now began to appear both above and below the elbow joint.

Feb. 1, 1883. Wound nearly healed; one abscess, situated just above the elbow and to the inner aspect of the arm, still discharging pus. The arm was now taken out of the Hodgen's splint, and placed in an anterior jointed splint, and the wounds dressed with basilicon ointment. Patient very much emaciated by his long confinement to the bed and his great physical suffering.

March 1. Several small pieces of necrosed bone were removed from the arm during the month of February. Patient gaining health and strength.

May 1. Several more small pieces of necrosed bone have been removed, and the wounds are now all healed.

November 30, 1883. Upon examination to-day, I find the patient a good specimen of a healthy man. His injured arm is still gaining in strength; in size, it is considerably smaller than its fellow. The elbow is anchylosed in a slightly flexed position. The muscles of the forearm possess considerable power, so much so, that he can lift and carry a weight of nearly if not quite fifty pounds; he can hold ten pounds out at arm's length, and is able to handle an axe in chopping wood; in fact, he is now employed as "chore" man by one of our citizens, and is able to perform all the duties pertaining to that place except that of sawing wood. He has acted in the capacity of hostler during the past fall.

The destruction of the ulnar nerve is a bad feature in this case, causing the patient more or less trouble and inconvenience all the time. The hand has but slight power of resisting the cold, and the little finger in particular is very sensitive to the cold, being cold all the time. It is devoid of sensation, and several times it has been cut and contused without his being aware that it had suffered an injury, until his attention was attracted to it by the sight of blood or ecchymosed spots.

On the whole, this man has an exceedingly useful member,

considering the character of the injury; one that is a vast improvement on a "stump."

ARTICLE V.

LEPROSY IN MINNESOTA. Report to the State Board of Health, of Minnesota, by DR. CHR. GRÖNVOLD, of Norway, Minn., Member of State Board of Health of Minnesota, and Chairman of its Standing Committee on Leprosy.*

There has lately been written much about a center of leprosy in the Northwest, from which the disease is said to be spreading. It may be interesting to see, how facts support this statement.

As early as in 1864, the condition of the lepers among the immigrants to the northwest had been an object for the attention of medical men from their old country.

In that year Dr. J. H. Holmboe, surgeon in charge of the Hospital for Lepers in Bergen, Norway, visited this country to study the influence that change of climate and other relations had on the development of the disease. He found twelve cases, of which two had originated in this country, while one, which came here leprous, had got well. His impression was, that their condition of health was better, than it would have been if they had staid in the old country.

In 1869-70 the settlements were again visited by a medical gentleman from the old country, the late Professor William Boeck, of Christiania, Norway, well known in medical literature for his writing on leprosy and syphilis. The result of his investigations in the Northwest Settlements may be read in *Nordiskt Medicinskt Archiv*, Band III., No. 1. He found in the three States, Wisconsin, Iowa and Minnesota, eighteen cases of leprosy, all of which had come from those parts of the western Norwegian seacoast, where the disease is endemic. Nine cases had the anæsthetic form, three the tubercular, while in six

*This article was furnished to this Journal as an "Original Communication," but for want of space was for more than one month deferred publication. It has since appeared in the *Journal of Cutaneous and Venereal Diseases*, but we are pleased to present it in the deparment for which it was originally intended as a contribution which can not fail to interest our readers in the North-West.

cases both forms were represented at the same time, or one superseding the other. In regard to the time of the appearance of the disease, in nine it had commenced already in the old country, and of these, five had lepers in their family, while four did not know of any leprous relations.

In the other nine cases the disease first commenced in this country. Of these, eight had lepers in their family, and the disease broke out respectively, two and a half, three, three and a half, five, six, eight, nine and a half and ten years after their arrival. These eight cases, that were developed on American soil, may depend on heredity, or they may have been caused by contagion in the old country, the only place, where it is probable that they could have met with other lepers, or the disease may have developed from a miasma in the old country. Either of the last two suppositions being right, the time of incubation will for two of the cases be nine and a half and ten years. Prof. Boeck considers them all as depending upon heredity in direct or lateral line. If he had any doubt, he says, in regard to the propagation of the disease by heredity, these cases would have convinced him.

As an instance, here is one of the cases, described in the above named *Medicinskt Archiv*.

"S. S., 45 years old, came, fourteen years ago, to America, to the place, where he now resides, and was in every respect perfectly well. His father had died, about 50 years old, in the Lepers' Hospital at Bergen; his brother and sister died leprous in the old country, one and four years ago; his father's sister had also had the disease. S. continued to be in good health, after his arrival to this country, for nine and one-half years. Four and one-half years ago he commenced feeling heavy and drowsy, and two years later, after a violent cold, tearing and fleeting pains announced themselves in the hands and feet, and also in the upper and lower extremities, and at the same time there was swelling of the same parts and the face, and an eruption of red spots appeared. The pains were so violent that he was obliged to stay in the house from January to May, and when he was able to get out of bed, his strength was gone, and he discovered, that his sensation was very much lessened along the peroneal side of the feet and legs, and on the ulnar side of the hands and arms. Since that

time he has always suffered from fleeting pains in the extremities and feels heavy and drowsy. 'I will never have a day of health any more,' he said. Sensation is at present very weak in hands and feet, as well on the outer as on the inner side, from the hands along the arms to the shoulders, and from the feet along the legs and thighs to the neighborhood of the hip. The muscles of the right hand, between the first and second finger, and those of the fifth finger, are considerably wasted."

This patient left the old country in good health, and continued to be so for nine and one-half years after his arrival in this country, in a place where there were no lepers before, and where it is not known that he has had communication with any.

The last of the nine cases, developed on American soil, did not know of any leprous relation, and may possibly be referred to contagion. The case is, in short, as described in the above named *Archiv*.

"B. J. is 39 years old; came to this country fourteen years ago; has for twelve years suffered, and is yet suffering from rheumatic pains in the extremities. Recently, after a day's hard work, she had in the evening a violent chill, and the next day there appeared spots on the arms, and successively on the lower extremities, chest, back, and face. These spots are distinctly morphœa spots, in some places slightly elevated. In them there is either complete anæsthesia, or very little sensation; outside of them the sensation is normal, except on the external side of the feet and legs. Her appearance is very good. She is fleshy, has good appetite; the bowels are a little constipated; menstrual flow scanty. She does not know of any leper in the family. She has once, six or seven years ago, been in the home of a leper. By others, it is said, that she, for some time, has taken care of a leper."

Prof. Boeck had his doubts whether this person did not also belong to a leprous family, and whether the disease was not due to heredity.

The professor was of the opinion that lepers here are better off as regards their disease than they would have been in the old country. "They have come away from the place where we see leprosy may originate spontaneously, and which certainly

will favor its development, when the disposition thereto is inherited. They have settled on fertile lands, where they certainly have to work hard to make a living, but they generally undergo no hardships, as we in Norway understand the term. Here is no work that can be compared with that done at the midwinter fisheries in open sea off the Finmark coast, or the hardships suffered while tending the cattle on the high mountain plateaus, which causes, so often, bring out the latent leprosy."

Since Prof. Boeck's visit in 1869–70, investigations have been continued in Minnesota regarding the occurrence and character of the disease in that state.

At present six cases and their whereabouts are known, all emigrated from that part of western Norway, where the disease is endemic. None of them are confined to bed, and most of them are able to perform their daily duties.

The following table will show some of the particulars of the cases:

		Age.	How long leprous.	How long in this country	Form of disease.	Leprous Relations.
Case I.*	Male	58 years old	18 years	27 years	Anæsthetic	Father, and father's sister, brother, sister, cousins
Case II.	Male	29 " "	7 "	20 "	Tubercular	Father, two brothers
Case III.	Female	29 " "	7 "	16 "	Tubercular	None
Case IV.	Male	35 " "	16 "	12 "	Anæsthetic	None
Case V.	Male	67 " "	Prodromes in the Old Country	17 "	Anæsthetic	None
Case VI.	Male	44 " "	10 years	15 "	Anæsthetic	Probably a brother

*Case No. I. is described by Prof. Boeck as No. 1., and is the one described above as "S.S" It is the only case, yet alive, of them he saw in Minnesota. He has, since the Professor saw him, been tolerably well, until the latest years, when the disease has made a quicker advance.

It will be seen, that two of them have the tubercular form, while four have the anæsthetic; in two of these—IV. and VI. —a little complicated with the tubercular. Two of them—IV. and V.—had the disease in the Old Country; but of these, one did not suffer much from it before seven years after the arrival to this country.

Of the other four, three know of leprous relations, while one—III.—denies that the disease has ever been in her family. She

is from a district where there are many lepers—Balestrand in Sogn. The main features of the case are:

Case III. came to America when she was 13 years old, in company with a sister of her mother, sixteen years ago, and has all the time since lived near the place she first went to. The first two years she lived with her aunt, but, after confirmation, she served as housemaid in families of the neighborhood, until she, seven years ago, discovered the first signs of the disease. After a severe illness, she says caused by cold, the legs swelled and some vesicles appeared, first on one, later on both ankles, followed by sores.

At present she exhibits the tubercular form of the disease, and presents a very repulsive appearance. The complexion is pale, or rather dirty white, the skin of the face thickened and rough. Tubercles, some suppurating, some torn by scratching, are seen over the eyes and on other places of the forehead, on the right nostril, and on the cheeks and chin; also on the ulnar side and back of both hands, where, as well as on the outer side and back of the feet and lower part of the peroneal side of the legs, is some anæsthesia. The voice is hoarse and rough. The nose seems flattened on account of the alæ spreading out. The lobes of the ears and the lips, especially the upper, are very much thickened and elongated. The eyebrows and eyelashes are gone, conjunctiva dirty white, with a troublesome secretion; cornea somewhat opaque; her eyesight is very much impaired. She denies having any discoloration of the skin, any sores or tubercles in other places than those above named, and on the ankles, where there are deep ulcers, laying the bone bare. She does not suffer much; only once in a while she feels a little oppression, and some slight pain in the chest and back; but this, she believes, is only caused by weakness.

Appetite is irregular, the sleep is commonly good. Menses commenced to be scanty when the disease broke out, and stopped soon. She feels worse in the spring and fall, but is seldom confined to bed. She takes cold easily. Like almost all lepers here, she ascribes her disease to cold. She suffered so from cold, she explains, in a place, where she was working, that she then and there got the disease. It is not known by herself or anybody

else, that she ever met with a leper in this country. She must have carried the germ of the disease with her from the old country, whether it has been communicated by contagion or a miasma, if she is right in her statement that the disease has been neither in her father's nor mother's family. The disease became evident when she was twenty-two years old, and had lived in this country nine years. She will not remember any prodromes; has probably tried to conceal her condition as long as possible. She tries yet to put the best appearance on her miserable condition.

Ten lepers of the immigrants are known to have died in Minnesota since the settlement of the conntry, all of them males. Of these seven died in the last seven years, and the following table will show some of the particulars of the cases:

	Age at time of death.	How long leprous	How long in America.	Form of the disease.	Leprous Relations.
Case I.	49 years old	24 years	19 years	Anæsthetic	Brother of mother's father
Case II.*	56 " "	14 "	24 "	Tubercular	A cousin
Case III.	35 " "	10 "	9 "	Anæsthetic	Father's brother
Case IV.	About 30 years old	3 "	13 "	Tubercular	Father and brother diseased
Case V.	About 30 years old	12 "	15 "	Tubercular	Brothers.
Case VI.*	62 years old	30 "	21 "	Tubercl. first 7 years, afterwards anæsthetic; disease stopped before death	Brother and father's brothers
Case VII.	30 " "		10 "	Anæsthetic	Mother's brother

* Cases II. and VI. were seen by Prof. Boeck in 1870, and described by him in the above named journal, as observation 3 and 2. Case II. got steadily worse until death, eight years after the Professor saw him, but in No. VI. the disease made no advance after the time Prof. Boeck saw him. He was in good health for many years, with the exception of the anæsthesia in the places already attacked, and an always open and discharging ulcer under one foot. When this discharge stopped, about fourteen days before his death, vomiting set in, which became more and more distressing, so he could keep nothing in his stomach. He was not confined to bed, but moved about as usual, until the day and hour of his death, which occurred thirty years after he was attacked, seven years after Prof. B. saw him and described his case.

It will be seen that three of them had the anæsthetic form, and died twenty-four, ten and thirty years after they got the disease. The last case, No. VI., Boeck's observ. 2, is an instance of one form changing into the other; the disease commenced in the tubercular form, and continued so for seven years; after a violent fever, it changed into the anæsthetic. Three had the tubercular form, and died, after having had the disease fourteen, three, and

twelve years. Case II. got the disease ten years after his arrival in this country, when he was 42 years old.

All of them had lepers in their family; three of them had the disease in the old country; three got it here; two, ten years, and one, three years after their arrival. Four of the lepers—two of them living yet—have full grown children, born in America; two have also full grown grandchildren. One (No. VI. of last table—Boeck's observ. No. 2) has fifteen grandchildren, aged from 2 to 22, and two great-grandchildren, and in none of them has any sign of the disease been discovered. The other (No. 1 of the first table, Boeck's observ. No. 1), who belongs to a family so strongly infected with leprosy—lepers were his father and father's sister, his brother and his sister—has full grown children, and many grandchildren of an age up to 17, all in good health.

The suggestion of the above facts, as far as they go, seems to be, that the disease is not so easily acquired here in the Northwest as in the old country, be it by heredity or contagion. The dry climate is possibly not so favorable for the development and the communication of the disease, that at present mostly belongs to the sea coasts and islands. The chances of contagion are decidedly less here than in the old country; there is greater cleanliness, as a consequence of greater economical prosperity, and the new built houses of the first settlers in a new country furnish no filthy nests for contagion.

But once acquired, the disease seems to run its regular course without abatement.

Norway P. O., Goodhue Co., Minn.

ARTICLE VI.

OUR INSANE. A Lecture Delivered Before the Chicago Philosophical Society, January 19, 1884. By S. V. CLEVENGER, M.D., Special Pathologist Cook County Hospital for the Insane.

Volumes have been and will be written concerning what has been done, is being done, and will be done for the insane, and anything like an attempt at an exhaustive review within our

present limits must fall short of the vastness of the subjects involved. A purely sociological view of alienistic matters would require inclusion of allied considerations the scope of which would drive us further from the matter in hand. Let us, then, look at the insanity about us from the standpoint of the alienist, who comes most in direct contact with our insane and the problems suggested by their existence. Retrospective and prospective generalizations are afforded from this vantage ground as follows:

1. Scientific inquiry into the causes, phenomena, and treatment of insanity has resulted in an increased number of recoveries, more humane treatment of the insane, and enlightenment as to the prevention of insanity.

2. We are indebted to European research for the greater part of our knowledge of insanity as a disease, and comparatively little has been done in America to forward psychiatrical studies.

3. Popular conservatism due to lack of information on these subjects is the cause of the national apathy in this respect, but eventually an activity in the prosecution of these studies will prevail in the United States unsurpassed in any other part of the world.

Insanity is the inability to be impressed and to conceive quantatively and qualitatively enough to guide actions in harmony with the individual's age, circumstances and surroundings, and the failure to properly coördinate impressions and frame logical conclusions and actions, except when occurring in the course of sleep, trance, somnambulism, coma, or simple epilepsy, hysteria and chorea, or during ordinary mental abstraction.

But the futility of making precise relative definitions is well known. No matter how thoroughly the pathology of disease of any kind may be known, disease itself is incapable of definition. The mathematician's definition of a point is an absurd one, owing to our inability to determine the boundaries of the finite. Where mentality begins and ends must be conditioned, and medically it is sufficient that the brain is the accepted organ of the mind, and that insanity is a manifestation of a brain disorder. The definition attempted above is modified from Spitzka's, and doubtless

not improved. Reference to hallucinations is omitted, for they may exist without insanity. Germany, Italy and France have dropped definition discussions. England and America, in their medico-legal evolution, have perpetuated them, as it is found a convenient stumbling-block in the way of medical testimony.

Prevalent ideas of insanity are vague ones, and biased as are all sociological conceptions. One who visits an insane asylum for the first time finds little therein as he had mentally pictured it. Many of the patients are at liberty to come and go at will, some being merely paroled on their honor not to leave the grounds. You may observe gangs of insane workmen for weeks and fail to discover anything indicating want of ordinary intelligence among them. Female patients occupied in the sewing room seem intent upon their work, though an occasional silly act or expression may escape them. In most wards, as a rule, there is quiet and order, the inmates pace to and fro, or are seated about apparently absorbed in thought, the cases requiring more control are gathered together in one part of the building, and here the ideal madman may be seen with hair erect, eyes protruding, flushed, angry countenance, demonstrative and boisterous; but he may not be so dangerous to others as the quiet maniac who watches his opportunity to catch you off your guard. Every degree of physical condition is observable, from the robust to the weakly. Some are confined to bed by sickness. others appear to possess the greatest vigor. Strength and ferocity sometimes exist in the same individual, and as may be imagined, it forms a disgreeable combination. The weakly are as apt to be troublesome, and usually supplement their lack of muscle by craftiness. Destructiveness is a prominent trait in a large number of cases. Walls are defaced, windows and furniture broken, bedding and clothing torn into shreds, regularly, day after day, or night after night by some, and only at long intervals by others. The tendency of repeated attacks of furor is eventually toward terminal dementia, "that tomb of the mind whence no errant intellect ever returns." In this stage the lowest automatic movements of the body are alone performed, the individual breathes, eats and sleeps, but must be led and fed, nothing can arouse him from his stupor, and death approaches all too slowly. One of the most

noticeable forms of insanity met with in asylums is known as melancholia agitata, wherein there is much weeping, verbigeration and wringing of hands, with other actions indicative of distracted grief, but a more horrible form of melancholia exists which would escape your notice altogether, owing to the listless apathy of the sufferer. Melancholia attonita, or "thunder-struck melancholia," is a mental condition of great torture. Those who have emerged from it with sound minds state that they have seen their relatives and friends torn limb from limb, and that the food offered them was soaked in human blood. Every imaginable fiendishness was enacted before their eyes with the accompaniments of groans, shrieks, appeals for help and other frightful sounds. These phantasms are terribly real to those who experience them,and resemble vivid nightmares.

When the furibund condition is not present, the chronic maniac is not apparently distressed by his hallucinations. He accepts his vagaries as real, and confuses the purely subjective with the really objective scenes. Skeletons, ghosts, and other hideous forms mingle with the actual personalities about. Divinities, saints, angels, and devils float to him from the sky. Voices, pleasant and unpleasant, follow him, and frequently in obedience to their commands he will do violence. Thus, upon one occasion a negro at the County Asylum, while looking from his window saw God in a chariot, who commanded him to break his way out. An hour thereafter the corridor looked as though a tornado had swept it. The exalted emotional condition of simple mania may never reach the explosiveness of furor, the entire life of a hypomaniac may be one day dream. Everything seems beautiful to him; trees, fountains, flowers, birds, gorgeous surroundings, artificial as well as natural, abound in this phase. Everybody and thing seems pleasant, no matter what the surroundings may be. The heart is happy, the mind is blissfully contented. Something similar obtains at times in the delusions of grandeur attending paretic dementia. Millions of dollars, diamonds, ships, railways and great enterprises, or intellectual achievements are claimed by him. Often he is a great magnate, general, or even deity. This is an incurable form of madness,with an average duration of three years, during which the sense of touch is so blunted that injuries

may be sustained without consciousness of them, and by paretic dements the invariable declaration is made that they feel perfectly well, or never felt better in their lives.

All know the frequency with which homicidal attempts are made by the insane, and many an ugly scar across the throat testifies to an attempt at suicide previous to admission. Every conceivable shade and variety of the many forms of insanity exist and frequently blend with each other confusingly, but in the main Spitzka's classification is justified by well-defined cases, such as simple mania, simple melancholia, katatonia, transitory frenzy, stuporous insanity, primary and secondary confusional insanity, primary deterioration, terminal dementia, senile dementia, hebephrenia, paretic dementia, luetic dementia, dementia from coarse brain disease, delirium grave, alcoholic, hysterical, epileptic and periodical insanities, idiocy, imbecility, cretinism, monomania, traumatic, choreic, post febrile, rheumatic, gouty, phthisical, sympathetic and pellagrous insanities.

All forms of insanity then known were included by Hippocrates in mania, melancholia and dementia.

In the eleventh century Gheel, in Belgium, became a resort for the insane, brought thither by a prevalent superstition that divine interposition in their behalf could be had there, and today, at this town, a large population is engaged in caring for lunatics on a peculiar system, one or two patients being allotted to a family, under the supervision of Dr. Peeters. As sociological investigations have but recently begun, and history in the past afforded us mainly personal gossip about princes, the ideas concerning insanity in olden times have been but imperfectly gathered, but enough is known to convince us that ancient tribes were not agreed as to the causes or treatment of lunacy, but in the main regarded it as evidence of the possession of a benign or malign spirit. Records of devils exorcised and of especial protection, even honors, accorded lunatics, show something of the way in which they were regarded. Court fools were frequently idiotic, monomaniacal, or imbecile, and from the manner in which existing savage, barbarious or semi-civilized people treat their insane, we may ascertain ancient beliefs referring to them handed down to the present through ages by these non-progressives. Western

American Indians often abandon their senile dements as well as other infirm and aged relatives, to the wolves, and to die of hunger, thirst, and cold. Idiots are destroyed by them, but imbeciles and other insane are regarded as especially favored by the Great Spirit, and allowed to do as they please. Among Mohammedans generally great reverence is shown certain forms of insanity, amounting almost to worship. Nations in their evolution have oscillated between deification of the insane on the one hand, and extreme cruelty towards them on the other, and it is not so long ago that they were burned alive and drowned as witches or possessed, in our own country. There has been a great advance made in this century in our treatment of the insane. We have to congratulate ourselves that we no longer beat and chain them, we have ceased to treat them as brutes and as possessed by devils; they are now only regarded in law as criminals.

Chiarurgi, in Italy, and Pinel, in France, inaugurated the cessation of cruelties, and in 1839 Dr. John Conolly, of England, abolished all mechanical restraint. He wrote, "Indeed it would seem as if at the period from the middle to near the end of the last century, the superintendents of the insane had become frantic in cruelty from the impunity with which their despotism was attended. The first principle in the treatment of lunatics was fear, and the best means of producing fear was said to be punishment, and the best mode of punishment, stripes. By degrees restraint became more and more severe, and torture more and more ingenious. An unsuspecting patient was sometimes induced to walk across a treacherous floor, it gave way and he fell into a bath of surprise, and was there half drowned and half frightened to death. In some continental asylums the patients were chained in a well and the water was allowed gradually to ascend, in order to terrify the patient with the prospect of inevitable death. The melancholy were tossed about in machines constructed for the purpose, to induce them to take a natural interest in the affairs of life." At Bethlem, Conolly saw ten females chained by arms or legs to the wall, clad in rags and filthy. He details many revolting scenes such as this, and concludes with the statement that the patient, who has created indescribable turmoil at home, when taken to an asylum conducted on good

principles, often becomes quite an altered person, disturbing nobody and behaving peaceably. Such sudden improvements certainly almost exceed belief, but the instances are not even rare. Every physician conversant with insanity has witnessed these marvelous metamorphoses many times. The European asylums underwent great changes for the better under Conolly and the Tuke family early in this century, but in the report of the Commissioners (Quincy, Hitchcock and Storer) on Insanity, to the Legislature of Massachusetts, (Pub. Doc.. 1864, Senate, No. 72) almost similar brutalities were unearthed, and the *American Journal of Insanity* for January, 1865, details more horrors as occurring in two other States in the Union. While America has, in many respects, led the world to grander conceptions of liberty and humanity, our country has lagged behind the monarchical governments in the matter of humanity to the insane. Reform movements have sprung up in the Union, the most noted being headed by Miss Chevalier, an energetic, enthusiastic lady, who has done more good than many ponderous missionary boards. Maudsley sums up the present non-restraint measures as follows:

"Its principle is to avoid a meddlesome interference; to make all the surroundings of the poor lunatic as tranquil, as orderly, as gentle as may be consistent with his proper care; to counteract the commotion in him by the absence of commotion in what is around him. The lunatic cannot any more than the sane person resist the steady influence of his surroundings; he assimilates them unconsciously, and they modify his character for good or for evil."

Herbert Spencer, who is a great advocate of kindness in the treatment of children, in "Social Statics" extends his views to treatment of the insane. "Let those who have no faith in any instrumentalities for the rule of human beings, save the stern will and the strong hand, enter the Hanwell Asylum for the Insane. Let all self-styled practical men, who, in their semi-savage theories, shower sarcasm upon the movements for peace, go and witness, to their confusion, how a thousand lunatics can be managed without the use of force. Let these sneerers at 'sentimentalisms' reflect on the horrors of mad-houses as they used to be, where was weeping and wailing and gnashing of teeth, where

chains clanked dismally, and where the silence of the night was rent by shrieks that made the belated passer by hurry on shudderingly; let them contrast with these horrors the calmness, the contentment, the tractability, the improved health of mind and body, and the not unfrequent recoveries, that have followed the abandonment of the strait-jacket regime, and then let them blush for their creed." Thanks to an awakened public interest, the non-restraint system is fast growing in favor all over this country, and asylums are beginning to vie with each other in making the surroundings of their unfortunate inmates pleasanter. Skillfulness is supplanting brutality in their control, and better results follow.

Intrinsic forces, such as a gradually introduced better class of managers; and extrinsic forces, such as public opinion, investigations, and the growing inclination of the people to examine public institutions of the kind for themselves, are surely elevating matters. Wherever a pride is taken in bettering the condition of patients, visitors are sure to find pleasant receptions, and the more intelligent classes are especially welcome. Dr. Spray, the superintendent of our county asylum, extends to every one of you a standing invitation to inspect everything about that building, and it is your duty, as citizens, to acquaint yourselves with the status of such institutions.

Now, while the humanizing influences have worked their reforms, and trans-Atlantic examples have been followed to the extent of stopping brutalities, while crimes of commission are seldom heard of, crimes of omission prevail. There is much to be done before psychiatry in America will have approximated the high standing it enjoys in Germany, France, and England. Dr. Tilden, the superintendent of the California State Asylum, embodies in his report words that should be well weighed by legislators and the public of our entire country.

Speaking of his establishment, Dr. Tilden says: "Its beautiful edifice, its well cultivated yards and gardens, its wholesome food, its comfortable clothing, its scrupulously clean halls, rooms, beds, and bedding, its excellent police regulations, combine in making a prison of the first class; and if such was the original purpose, I see not how it could have been more admirably accom-

plished. If, however, in creating a charity so munificent, so noble, it was intended to establish an asylum with hospital appliances for the *cure*, as well as the care and safe keeping of the insane, I am free to say it is, in my opinion, a most signal failure. If there is any difference between it and a well conducted State prison, it is in favor of the latter, from the fact that means of employment are provided for its inmates, while the inmates of the asylum spend their days in idleness. It will hardly be contended, I think, that our newspapers and a little gymnasium, with a solitary swing in the female department, can give the asylum of California a claim to the character of a curative institution."

It is the avowed desire of the American Association of Superintendents of Hospitals for the Insane, to introduce improved curative measures into asylums as rapidly as possible, and to establish hospitals for the insane, instead of the old prison asylums.

Herbert Spencer points to the fact that all institutions grow, evolve; they cannot spring into existence. What is to be done must come about gradually, and fifty years hence, our present asylum jails will be considered only as improvements on the ancient slaughter-houses in which the insane were penned up.

The duties of a superintendent of an asylum are similar to those of the landlord of a giant hotel, and in addition, he is the principal medical officer, with often but one or two assistants, himself having immediate charge of a number of wards. With the multitude of details requiring supervision in great caravanseries, imagine Messrs. Palmer or Drake during a cholera epidemic, with their houses filled with sick and dying, compelled to act as medical supervisors. But, says everyone, this is easily enough remedied. Let a business man look after matters pertaining to the stewardship of the asylum, and allow the physicians their legitimate field and nothing more. The experience has been so often repeated, it is coming to be almost common knowledge that this system has invariably failed. There is not a movement; not an ounce of supplies purchased; not a turn of a wheel, but has direct reference to the welfare of the patients in the asylum. Who can possibly be so well informed as to the needs of the establishment as the superintendent, who so well able to direct

the movements of men, machinery, and supplies about the place as he? Introduce your business agent with his ideas, in nine cases out of ten antagonistic to the medical superintendent's, simply because he has not the same matters at heart, the same problems to solve, nor the least appreciation of whys and wherefores, and there is constant necessity for endless explanations, arguments, appeals, etc., whenever trifling, to say nothing of important, matters are at stake; or, what is more apt to take place, there are clashings of authority, and the disgusting bickerings of a house divided against itself. Every alienist of note has given his opinion that the superintendent of an asylum should be supreme in command in the asylum as to all persons and things, and that no one disloyal to him, be he officer or employe, should be allowed to remain an instant.

Too often it is the case that petty strife abounds in these places, and, as everywhere else in the world, intriguing for place, with its plexus of lies, recriminations, and plots occur. The lives of nearly everyone about in that event are embittered, and at best it is a difficult matter to reconcile the heterogeneous ways of thinking encountered in large asylums. A superintendent has to be naturally a large-minded man to escape the effects of constant contact with the littlenesses of others.

The individuality of a superintendent will tinge the entire place. If he is small, small will be his servants. If he is lazy or cruel, so will they be. If his views are large, and he possess a compassionate heart, and is determined to do his utmost for his patients, that spirit will pervade the house, from the second medical officer to the scullion.

There is no escape for the superintendent from the oversight of details, but the anxiety and time devoted to them could be transferred to more purely medical affairs by affording him all latitude in the employment of faithful assistants and the elimination by prompt discharge of the unfaithful. All this presupposes the chief officer to be himself well fitted for the place. The frequent changes made in these positions, and the selection of inexperienced persons, produces great confusion and invariable retrogression. In Europe, the appointment of a superintendent without previous asylum experience is unheard of. Positions are secure

from other than medical and moral considerations, and a liberty of action and opinion is engendered among physicians directly caring for the insane unknown in our country. Upon superannuation, after faithful service, these officers are pensioned by their governments. Where the tenure of office is uncertain, there is little incentive to honest work, and great temptations for intriguing on the part of outsiders to dispossess those in office, not from any medical, scientific, or philanthropic animus, but from mere place-hunting greed. Who can work with the calmness and peace of mind necessary to carry on complex professional duties over a volcano which any minute may explode into a financial wreck, utterly regardless of the years of study and the fortune one may have expended in fitting oneself for an especial field.

The prime causes of all these embarrassments in the way of psychiatry are mainly the crude ideas among the people, as exhibited in their laws regulating the arrest and custody of lunatics. The strangely erroneous notions of insanity extant originated and perpetuate a very defective jurisprudence. The insane must either be held responsible for his actions, or he must not be. If not, then the question arises, how much insanity is required to exempt one from the consequences of having committed a crime? The ability to distinguish right from wrong is no guide as to responsibility, for an epileptic may be at one time in full possession of his faculties, and at another absolutely unconscious of what he does, and epileptics afford us the most terrible form of mental alienation. The literature of this subject is abundant, but we may only glance at portions. The English law seems fair enough which places responsibility, if at the time of committing the offense the accused knew right from wrong, but in the determination of this point juries will hang the more insane, and let the less insane escape, often acquitting one and condemning another, both having the same form of insanity and degree of responsibility, and even the knowledge of right and wrong does not bear scientific scrutiny as a means of judging responsibility.

In the case of *State vs. Pike* Chief Justice Perley, of New Hampshire, instructed the jury that they should return a verdict of not guilty, "if the killing was the offspring of mental disease

in the defendant, that neither delusion, nor knowledge of right or wrong, nor design, or cunning in planning and executing the killing, and in escaping or avoiding detection, nor ability to recognize acquaintance, or to labor or transact business, or manage affairs, is, as a matter of law, a test of mental disease; but that all symptoms and all tests of mental disease are purely matters of fact to be determined by the jury." "A striking and conspicuous want of success," said Judge Doe in the same case, "has attended the efforts made to adjust the legal relations of mental disease. It was for a long time supposed that men, however insane, if they knew an act to be wrong, could refrain from doing it. But whether that suspicion is correct or not is a pure question of fact, in other words a medical supposition—in other words a medical theory. Whether it originated in the medical or any other profession, or in the general notions of mankind, is immaterial. It is as medical in its nature as the opposite theory. The knowledge test in all its forms and the delusion test are medical theories introduced in immature stages of science in the dim light of earlier times, and subsequently, upon more extensive observations and more critical examinations, repudiated by the medical profession. But legal tribunals have claimed these tests as immutable principles of law, and have fancied they were abundantly vindicated by a sweeping denunciation of medical theories, warning that this aggressive defense was an irresistible assault on their own position. In this manner opinions purely medical and pathological in their character, relating entirely to questions of fact and full of errors, as medical experts now testify, passed into books of law, and acquired the force of judicial decisions. Defective medical theories usurped the position of common law principles. Whether the old or the new medical theories are correct, is a question of fact for the jury. It is not the business of the court to know whether any of them are correct. The law does not change with every advance of science, nor does it maintain a fantastic consistency by adhering to medical mistakes which science has corrected. The legal principle, however much it may formerly have been obscured by pathological darkness and confusion, is that a product of mental disease is not a contract, a will, or a crime. It is often difficult to ascertain whether an in-

dividual has a mental disease, and whether an act was the product of that disease, but these difficulties arise from the nature of the facts to be investigated, and not from the law, they are practical difficulties to be solved by the jury, and not legal difficulties for the court."

In *State vs. Jones*, Judge Ladd, on the right and wrong test of responsibility, claimed that to be "an interference with the province of the jury and the enunciation of a proposition which in its essence is not law, and which could not in any view safely be given to the jury as a rule for their guidance, because, for aught we can know, it may be false in fact." These opinions are quoted as embodying most advanced views. Witchcraft was dealt with by the law much as insanity is to-day. The jury were given erroneous instructions on matters of fact under the name of law. Lord Hale decided that there were such creatures as witches, for the Scriptures had affirmed as much, the wisdom of all nations had provided laws against such persons, which is an argument of their confidence of such a crime. But the enlightened opinion of the country made the witch he condemned one of the last to be executed in England. As with witchcraft, so to-day with insanity, the judge instructs the jury wrongly on matters of fact, and the jury finds a verdict accordingly."

Judge Doe further said, "If the tests of insanity are matters of law, the practice of allowing experts to testify what they are should be discontinued; if they are matters of fact, the judge should no longer testify without being sworn as a witness and showing himself qualified to testify as an expert."

In *Boardman vs. Woodman* the same authority states, "If it is necessary that the law should entertain a single medical opinion concerning a single disease, it is not necessary that that opinion should be a cast-off theory of physicians of a former generation."

Expert testimony is another aggravating feature of law courts. As long as men are as they are, physicians as well as others will, for the sake of the fee, and without the least preparation or fitness, enter the courts as experts and pass upon subjects the nature, literature and facts of which they are ignorant; and again, men of special training will prostitute their calling by testifying with partisan zeal, suppressing the truth as they know it, and mislead-

ing the jury as to facts. This state of things should not be countenanced. The expert may coach a lawyer, but should not appear as a partisan. He should appear as an expert to tell the truth as he knows it, regardless of how it may affect the case. If his honest convictions are with one side or the other, he may be engaged by defendant or plaintiff; but having the confidential communications of one side, he may not subsequently appear against that side. And the presentation of the hypothetical case is not a correct method of eliciting the truth, for it is impossible to embody all the details necessary to a full understanding of the case by such means. Dr. Ray thought the expert should be asked, "Do you give your time and attention continuously to a particular branch of medicine, and is that mental, or psychological medicine? and that opinions should be given in writing, and read to the jury without oral examination. It would then be deliberately prepared, its explanations well considered, and its full force and bearings clearly discerned. It would go to the jury on its own merits, no advantage being gained by either party by the superior adroitness of counsel in embarrassing the witness and pushing his statement to a false or ridiculous conclusion." The animus of the expert, with his dishonesty or incompetence, would thus be disclosed.

The Illinois law provides that the sheriff, jailer or other suitable person may detain persons until trial. Both jailing and the trial by jury of the insane are processes unworthy a civilized age and people. The Board of State Charities takes proper ground in this matter, in its last report, as follows:

"Does not the uncertain condition in Illinois under our law demand a return to the common sense law, with modifications, once existing in this State, which virtually treated an insane person as mentally sick, and did not require him to be treated as a criminal and be tried by a jury? What good has been effected by the change in the law? We maintain that no good has been done, and that serious questions arise, clogging the individual's future, and also attaching more of a stigma, if such it be, of insanity by the finding of a jury. Why not leave the matter, as in many of our States in the United States and as in England, to be dealt with as a scientific, professional question for the medical

man and pathologist, and not for the finding by a verdict of jurors, based on slight evidence? Is it essential to liberty and to the maintaining of personal freedon from undue restraint, that the law should exist in its present form? A writ of *habeas corpus* will always lie as a writ of right to inquire into the cause of the detention of any party in an hospital for the sane or insane. It is believed by many that our present jury law was superinduced by undue excitement growing out of one case, which was by no means a clear case of misapplication of the rigor of the law. It is required that the near relatives (and when none exist, then a respectable person of the county) must petition for the trial of the person's sanity or insanity, and it is obvious from the law that the proceeding is for the welfare of the individual supposed to be insane. It is not a criminal charge, and yet you treat the matter with the formality of a charge or trial for crime; in place of having a commission or board of physicians, you try the person and render a verdict, from which you provide no escape by his individual act that would be legal."

The *Alienist and Neurologist*, in commenting on this, adds: "Let the law pile high the penalties for false certificates of insanity, and searchingly inquire as to the qualifications and responsibility of those who may sign them, but save the poor lunatic from the uncertain chances of speedy treatment through a petit jury trial."

The time lost during the jail incarceration, which might have been spent under hospital treatment, in many cases confirms the insanity for life, and every alienist knows the importance of prompt treatment in recently developed cases; frequently all that can be done is at the inception of the malady. Many of the insane dwell persistently upon these court proceedings, and their delusions are tinged with them.

Those with delusions of persecution frequently find confirmation of their fears in these trials and commitments, and some talk of but little else. Male case No. 212 and female case No. 263, at the County Asylum, are instances.

Investigations are being made to ascertain if insanity is increasing. In the present state of statistical information much can be said for and against such a conclusion. The apparent

increase may be due to more insane being registered now than formerly. In 1859, in England, the rate was 1 to 540; in 1876; 1 to 375. In the United States the census returns numbered 44,148 insane in 1870, the proportion being 1 insane to 953 of the entire population. California's proportion being 1 to 484. At the same time in England, it was 1 to 403; in France, 600; Scotland, 336; Ireland, 302; and Russia, 450. Farr states the rates for upper and middle classes in England are 1 to 484, and lower classes 1 to 353. While asylums show more females than males under treatment at a given time, there is actually more insanity among men everywhere than among women. The apparent anomaly is caused by the females being more capable of enduring an indoor life than the males, a larger part of whom either recover or die sooner than females, and consequently are present in less proportion.

As to causes of insanity, Dr. Funkelburg, of the Russian Public Health Commission, claims that in that country lack of intellectual culture, insufficient food, unhealthy dwellings, are causes, but abuse of alcoholic liquors sends 20 per cent. to asylums and 40 per cent. to jails.

Lord Shaftesbury, who was chief of the lunacy commission for fifty years, said that 50 per cent. of insanity in England was caused by intemperance. According to Lunier, 50 per cent. of the idiots and imbeciles in Europe had notoriously drunken parents. Michét figures hereditary influences as predisposing to one-half of all insane cases. Guslain claims heredity operative in 30 per cent. of cases, and Anstie ascribes the origin of heredity to want of education, mental vacuity, and excesses, particularly alcoholic. A good instance of the misery entailed by degraded ancestry is afforded by the Jukes family, of New York. Margaret Jukes, in six generations, had 709 descendants, all of whom were thieves and murderers or idiots. Exciting causes in one generation become predisposing in the next. Dr. Page, of the Connecticut (Hartford) Retreat, analyzed 2,333 cases, and found one-half due to causes largely under the control of man. Hereditary tendencies were at the bottom of most cases, the bad habits of parents becoming diseased conditions in the children. Head injuries and sunstrokes are prolific sources of insanities. Dis-

eases such a scarlatina, meningitis, small-pox, rheumatism, gout, lues, epilepsy, chorea, hysteria, predispose to and directly cause insanity. Pellagrous insanity is a form produced by eating diseased corn. Morphine, chloral, and other poisons sometimes cause loss of mentality. Emotionalism, such as is engendered by too much novel reading and failure to cultivate reasoning faculties, is a cause. Consanguineous marriages often predispose offspring to weak mental condition. Change of environment, domestic troubles and griefs, roughly estimated, cause 12 to 15 per cent., but preëxisting mental instability may be supposed in many such cases. The two extremes of mental stagnation with sensual degradation upon the one hand, and gloomy fanaticism on the other, and dwelling too long and intently upon religious questions, especially when presented in narrow and exclusive forms, drive to despair or perilous exaltation of the feelings.

It may be conceded that there is an absolute necessity for taking care of the insane, for society and individuals would suffer for want of protection against them if not for them. The altruism of this public charity is not so evident as its egoism. The assumed function of an asylum is for the care, and, if possible, cure of the insane; the State is not supposed to entomb every one admitted as hopelessly insane.

Thirty years ago, Dr. Forbes Winslow inveighed against the dogma pervading all grades of society, "Once insane, always insane." It is an enormous assumption, one of the lying old saws, which among unreflecting people is chargeable with having done much harm. Many patients recover from insanity never again to become insane. Many more are so far improved as to be of use in the care of other insane. Were this not the case the expenses of maintenance would be immensely greater than they are, for the work done by inmates is an important feature of the asylum. Are we justified in doing anything at all for the insane? Should they not be allowed to perish as rapidly as possible, without effort in their behalf? are questions a common humanity has answered by the establishment of asylums, and having thus answered, the care of these unfortunates must be advanced in keeping with the progress of knowledge, for neglect in part would justify neglect in toto, which is equivalent to asserting the right

of the State to destroy its lunatics. If a charity is worth carrying out at all, it is worth doing well. The falsehood that no one recovers from insanity has done its evil work, let the knowledge that many recover, and that the advance of medical science has rescued a still larger number, do its good work. If the plea is made that by this means hereditary taint is propagated, it may be shown that it as frequently prevents its propagation, and even granting it, failure to provide every reasonable means for cure and care may be extended to ordinary bodily diseases. All hospitals should be converted into tombs, medicine should be dismissed and phthisis, wounds, and every other ailment be allowed to run their course with the fatalistic justification of the Menonnites. No help should be afforded the drowning man, his death will ensure the propagation of a more cautious race. One-half of the world is subject to inherited bodily taint, and an extension of the *laisser faire* of asylum treatment would justify one-half the world in destroying the other half, and destruction is the same in result, whether by direct or indirect means, by neglect or by assault.

Granting that the insane should be cared for, the accusation cannot be made that America does not house, clothe, warm, and feed them. The grand edifices for the purpose scattered throughout the Union testify that it does, but a great fault to be found is in want of organization and concert of action between legislative bodies having these matters in charge. Large dormitories prevail in European asylums in preference to numbers of small rooms, because experience has demonstrated their usefulness in the prevention of suicides, the prompt care of the sick, and the enhanced ability of a few persons in watching a large number of patients. Dr. Spray has recently introduced this feature in the County Asylum, and the cost of construction of asylums is greatly lessened, but in very few places is it in vogue in this country. In England, the corridor is only found in the antiquated asylums, but it exists without exception in all asylums here. Statistics fully prove that the best results, both as to recoveries and expense, are obtainable from a number of small asylums, with a capacity not exceeding 700 inmates, rather than from larger asylums, but the lesson is unheeded with us. Medical treatment becomes less

efficient to almost impossible the larger the asylum grows. In the European asylums, the history of each patient is carefully ascertained, and all ancestral peculiarities recorded. His condition and the treatment he undergoes are set down day by day till his death or discharge. With some noteworthy exceptions, this is not the rule in the United States. In many asylums, merely the name, age, dates of admission and discharge, only are recorded. A knowledge of the antecedents of a disease is so requisite to proper treatment, in the great majority of cases, as to make this neglect criminal, whether the fault of the State or of individuals. Across the sea, physicians are selected who have grown to eminence in the treatment of mental and nervous diseases, as officers for asylums. Treatment is based largely upon the conditions known to exist in the body of the patient; there are special forms in which, as yet, nothing but mitigating measures are justified, as in paretic dementia, which rarely, if ever, recovers, and while many other cases are hopeless, there are still many which become chronic only through failure to properly diagnose and institute prompt and suitable treatment. Many cases also recover where nothing has been done for them, and some even in spite of improper treatment, but this is no justification for withholding treatment. The same is true of all other diseases, and it is as necessary that the alienist should be well versed in his province of medicine, as any other specialist should be in his division, but special fitness is not a distinguishing characteristic of every American insane asylum physician, and if, through experience and much study, he has become an adept in this field, with corresponding loss of expertness in other branches of medicine, it often happens that in the rotation of office he must give place to some one else less versed in these matters, who must acquire his knowledge at the expense of many a patient's life.

An abstract of the methods used, and the principles governing the treatment of mental diseases, would be tedious reading to a popular audience. Suffice it to say that the bodily health must be maintained, and the circulation particularly regarded. Sometimes a slight scar will indicate a course of medicine the beneficial results of which may be predicted in nine cases out of ten. An injury to the head—frequently without visible evidence of it,

and only the history of the case as a guide—may justify a surgical operation, in the happy issue of which our literature abounds. Correction of some physical or moral vice, and educational measures which call into requisition latent reasoning powers, are often successful. Male cases Nos. 250, 227, 289 at the County Asylum are good examples of recent cures, which are, and may be, effected wherever the proper interest in a case exists, with sufficient knowledge on the part of the medical attendant. We may well ask, what is the cause of so much want of progress in our psychiatrical affairs? Why is not legislation brought to bear upon the subject?

Those who believe that such things may be corrected by law would do well to consider an instance in point: The New York legislature had become fully impressed with the necessity for advancing the medical status of its asylums, and proceeded to equip one with all the paraphernalia of a pathological laboratory. About $50,000 was expended in this way, a liberal salary was fixed for a pathologist, who was finally selected. He had never been heard of before; he was and is ignorant of medical matters, and since his incumbency has published at an expense of $3,000 to the State plagiarised matter from the works of Rindfleisch, a German standard author on pathology.

The fault does not lie with legislatures, supervisors, superintendents, or the medical men of asylums that Europe is ahead of us in governmental fostering of such science. Some of the causes may be ascribable to conditions pointed out as likely to occur by Washington in his farewell address, but as this government is of the people and by the people, no one is to blame but the people themselves. A fountain cannot rise higher than its source. An aristocracy in Europe which, however, it may operate toward degrading the masses on the one hand, through its educational influences affiliates with and maintains fit men in professional State fields. While at home we escape the evil domination of monarchy, we cannot expect to find measures adopted and establishments reorganized on a basis which the people cannot understand.

So long as the populace know nothing of what has been accomplished by other nations in this field, so long will nothing be done to elevate the medical and scientific management of asylums.

As soon as the public grow to the requisite knowledge, an overturning of antiquated systems will proceed vigorously. The people of the State of Virginia, in 1882, were divided on a State debt issue. Among those who favored the payment of the debt were all the superintendents of asylums in the State, and they were summarily dismissed from office on the success of the repudiation measure. This was a popular judgment of unfitness to treat the insane. Herbert Spencer has said that America will give rise to the highest civilization the world has ever seen, nor need we think otherwise from the slow progress toward it in some directions. Changes for the better are being gradually made and will endure. Many fallacies have to be overcome, among them the ideas that it is better to neglect early treatment by delay in resorting to the asylum; that the stigma of insanity through asylum treatment is a greater calamity than the risk of perpetuating insanity through avoidance of asylum treatment; that jurors are more to be trusted than physicians, both as to knowledge of insanity and in matters requiring ordinary probity.

Society imposes a penalty upon efficiency in these abstract studies. If the student attend too closely to his work, his absorption and enthusiasm entail withdrawal from contact with the world at large, and its crude ideas as to how psychological problems should be dealt with. The world readily forgets those who are forgetting it, and however correct may be the student's methods, however conscientious and capable he may be in the performance of his duties, so long as the public is not educated up to his ideas he can expect no help from it. The general practitioner realizes that his chances for financial success are only through closing his books, forsaking his instruments of research, and cultivating so-called society, with its lap-dogs and small talk. A professional man is judged, as usually every one is judged, by the amount of money he obtains, notwithstanding the so well known fact that charlatanism invariably fattens where merit and skill may starve. As in every field of science, so it is in the psychiatrical, the world has advanced through the misunderstood, often reviled, efforts of its underpaid, neglected searchers after truth. Emotionalism demands the strangling of the living Jenner for proposing to make us first cousins to cows, and rushes to the apotheosis of the dead

Jenner for his having while living conquered a terrible disease.

The superstition which regarded insanity as a penalty for sins and teleological doctrines engendered fatalistic views of insanity, and hindered rational methods of research by ignorantly declaring mental processes insoluble.

The prevalence of purely subjective methods of study of mental phenomena perpetuated false views, and obstructed physiological method, even though *mens sana in corpore sano* had become cant. It is coming to be generally realized that the laws of the mind are part and parcel with the laws that govern the universe; that physics is more useful in psychology than metaphysics, and that mentality may not be understood without a knowledge of the anatomy and physiology of the brain, no more than the horology of a clock may be grasped without knowledge of it mechanism.

But the laity cannot be blamed for want of information as to what has been accomplished toward clearing up these mysteries, while it is only within the past few years that these matters were taught in medical schools in America. Had there been as thorough instruction on these subjects in our medical schools, we would not see a dozen widely different forms of insanity sent to asylums as "softening of the brain." Some of the psychoses often erroneously included in this omnibus are curable.

The literature of alienistic knowledge is beginning to overflow from special repositories, such as the *Journal of Mental Science*, *Journal of Nervous and Mental Disease*, *Journal of Neurology and Psychiatry*, and *Alienist and Neurologist* into general medical periodicals. There is enough definiteness now about what is known of insanity to make it incumbent upon the general practitioner to apprise himself of what is known particularly as the family physician is usually the first one called in the incipiency of, and best time to properly treat, the mental complaint. It will not be necessary for him to dive into the minutiæ and polemics of psychiatry, but when asylum treatment is not available, problems as grave as are presented by great hæmorrhage, collapse, or pernicious fevers appear with the advent of mental derangement, and timely, judicious control may often restore reason.

So far as money can accomplish anything, it has been lavished by Europe upon psychiatrical problems. Vienna, Paris, London, Rome and Florence are prominent as centers of research. Nor has there been want of previous special training to fit the physicians there who lead in these matters. They are educated with special reference to physiological research. Not only the anatomy of man, but that of the lower animals is being worked out microscopically; the intricate mechanism of the nervous system is gradually being disentangled; the dynamics of life are being delved into, and many workers in special fields are contributing to synthetical knowledge, which is rapidly growing in exactness.

In subsidiary fields physiological chemistry has its Gamgee; biology its Huxley and Hæckel; minute anatomy its Meynert; vivisectional experimentation its Fritsch, Hitzig and Ferrier; pathology its Exner, as foremost representatives of a host of explorers, who work with scalpel, microscope, electrical apparatus and other scientific appliances year after year in the light afforded by Darwin and Spencer. Clinical observations are made by Hughlings-Jackson, Charcot, Maudsley, Brown-Sequard, and all the asylum officers in Europe, and a number of them on our side of the Atlantic. Among our native workers outside of asylums, we have Hammond, Spitzka, Kiernan, Mills, Wood, McBride, Schmidt, Jewell, Brower, Seguin, Morton, Hughes, and others.

As an illustration of one of the multitude of methods, Exner's process may be mentioned. From 2,000 cases of diseased conditions found in different parts of the brain, patiently and logically examined, in connection with the accompanying peculiarities exhibited by each patient before death, he has formulated laws which go to supplement the localization of function in the brain, and show us that while various parts of the brain are absolute centers for the movement of particular groups of bodily muscles, relative centers exist also for these same muscles in other parts of the brain. A flood of light was let in at once upon many apparently contradictory phenomena, and methods of observation have been correspondingly improved. The Italian Golgi, by an improved process of staining, has enabled us to trace out hitherto unrecognizable microscopic connections of nerve

fibers. The importance of this may be understood by regarding the nerves as so many telegraph lines between certain stations, whose connection with each other must be ascertained before cause and effect can be affirmed. When the mechanism and the forces at work are both better understood, related phenomena are correspondingly better known.

The tendency of modern research is to show that the circulation of the blood plays a very important part in mental workings, and that upon the integrity of minute blood-vessels the mind depends for its existence, as much as upon the nerve cells and fibers the vascular system nourishes, and as Morel states, that "the brain is always the seat of the insanity, but not always the seat of its cause."

Some of the problems undergoing discussion by alienists are: Why are more of one nation than of another insane? What especially induces insanity? What temperaments are most predisposed? The precise defects in the organism which accompany insanity. How those predisposed to insanity may avoid it. The proper treatment of all kinds of insanity. How far treatment is serviceable. The prevention of insanity and its reduction to a minimum. These and kindred inquiries befit a social arrangement which, as Spencer says, survives only on condition that each generation of its members shall yield to the next benefits equivalent to those it has received from the last. The well being of each is involved in the well being of all. Whatever conduces to their vigor concerns you, for it diminishes the cost of everything you buy. Whatever conduces to their freedom from disease concerns you, for it diminishes your own liability to disease. Whatever raises their intelligence concerns you, for inconveniences are daily entailed on you by others' ignorance or folly. Whatever raises their moral characters concerns you, for at every turn you suffer from the average unconscientiousness."

To this end the medical and scientific standards of American asylums should be raised to that existing abroad. If there is justification in caring for and treating the insane at all, there is equal justification for the reduction of the study to a science that will tend toward obliterating as much insanity as lies in our power, and we may expect much from a people who work indus-

triously in every field recognized as a paying one. It is as much the duty of a nation to explore the causes of diseased bodily conditions of its individuals, as it is to survey its lands geodetically or geologically, or with reference to its flora and fauna, and ultimately the information elicited by such explorations would be diffused among and benefit the people. Our County Asylum, thanks to the intelligence of the Commissioners, ranks with the advancing condition of alienistic matters in the Union. Voluminous case books are being filled there day by day with the progress of each case, the results being communicated through medical journals, with pathological and microscopical details, in connection with all that can be learned concerning the patient. American asylums generally are gradually increasing their medical assistance.

The visiting physician system, as formerly organized, has proved valueless. The State should employ well recognized skilled specialists, in addition to the regular resident physicians. By recognition is meant repute among reputable physicians. What has the specialist accomplished? what does he know? should be the questions of fitness, and the superintendent of the asylum should be untrammeled in his selection and dismissal of these specialists. The same objections to having business interferences with the superintendent, apply with equal force to his contact with coadjutors.

The resident staff for a 500 population asylum should consist of medical superintendent, three assistant physicians, one pathologist, one female physician as gynæcologist, one clinical clerk. A consulting staff to visit the patients weekly, or as suggested by the superintendent, to consist of one specialist in skin diseases, one eye and ear physician, one surgeon. Internes could be selected from medical schools among those wishing to fit themselves in psychiatry, and the clinical clerk is in Europe selected on that basis. There need be no fear of increased expense in such an arrangement, for the consulting staff would serve for the honor of the positions, and internes receive no salaries from any hospital fund. The additional cost for board of the extra medical men could be afforded for ten years by one year's curtailment

of unnecessary building details. Millions of dollars are expended in unwise architecture absolutely lost by the necessity for being undone in time. At Danvers, Massachusetts, a palace asylum was undergoing construction, while the insane of the State awaiting its completion starved and were frozen in dungeons of almshouses, and were without any medical attendance. This was before Gov. Butler's day. It is evident from such instances that mere desire for display was at the bottom of the erection of a grand asylum, and that no question of benefiting the prospective inmates by medical or any other treatment entered into the intentions of its founders. Can economy be said to have justified this condition of things?

The coming century will witness as great an advance in the methods of treating the insane as this century has surpassed the eighteenth in their treatment. The time is coming when, instead of millions being expended for palatial asylums, a few thousands will suffice for comfortable hospital construction, and the surplus be expended in curative measures, and in the search for the causes and the means for prevention of insanity. Asylum officials will be selected through special fitness for their vocations. Instead of its being as much as one's position was worth to ask for a post-mortem case of instruments, every hospital for the insane will become the nucleus of a busy faculty of investigators, and even six months work on the part of a competent physician will not be considered too much to devote to a single post-mortem investigation, with the occasional result of producing a Virchow, who could see more in a pathological specimen in one day than multitudes of other observers in a lifetime. The methods of research have been established, the course to pursue to arrive at definite results is now known, and the means and workmen are coming, for with the dawn of the twentieth century the exactness of the knowledge already evoked will have advanced by that time to an extent that will open the eyes of the meanest of the multitude to the necessity for more thorough investigation, not only of the brain, but of the entire body in connection with the *intra viam* history. There is nothing like the realization that a thing *pays* in America to induce activity.

"To tell whither a measure is drifting, it is important to take

as data for sociological conclusions not the brief sequences, but the sequences that extend over centuries or are traceable throughout civilization," says Spencer. From brutality in the treatment of the insane in the past we have advanced to kindness, and the tendencies are toward a more careful study of the causes and means of prevention of insanity. The immediate effect being an amelioration of the condition of patients living, with the acquisition of ability to combat the causes of, and to prevent insanity in generations unborn.

ACTINOMYCOSIS DISCOVERED IN AMERICAN CATTLE.—Dr. William T. Belfield, of Chicago, has made the important discovery that actinomycosis exists in American cattle. He was asked by the Commissioner of Health of Chicago to investigate a disease in cattle which has generally been known as "swell-head," and has been called by veterinarians, Cancer, Sarcoma, etc. Five animals were examined by Dr. Belfield, and a very short study of the specimens under the microscope revealed the true nature of the disease. Actinomycosis was only recognized six weeks ago by Bollinger, of Munich, who announced that it was a parasitic disease due to the presence of a rapidly growing fungus. It has since been discovered in the hog and in man. It generally first attacks the jaws, and probably gains access to the deeper tissues through carious or defective teeth. It spreads into the tissues of the head, causing tumefactions, suppuration, finally, if unchecked, pyæmia, and death. It may gain the blood and be transferred to other parts of the body. This happens especially with man, upon whom the parasite acts most virulently. It is supposed that its source is the grain with which animals are fed. The disease is generally fatal, though prompt measures may check it. The meat of animals dying from actinomycosis is not of first quality. It is not, however, yet known that it is absolutely injurious. Thorough cooking, at any rate, destroys the parasite. Dr. Belfield's discovery is an important one; and should become promptly known to veterinarians and sanitary officials.—*New York Medical Record, Dec.* 8, 1883.

Society Reports.

CONCERTED ACTION BY STATE BOARDS OF HEALTH.

[Reported for the CHICAGO MEDICAL JOURNAL AND EXAMINER.]

There has been a growing conviction among leading sanitarians intrusted with the official execution of practical health measures, that while the work of the American Public Health Association is of inestimable value in promoting the interests of sanitary science and sanitary reform, there is a constantly increasing need for an annual conference of State and other health officials in regard to practical affairs of their everyday work, some part of which work cannot profitably be discussed in a public meeting consisting largely of persons not familiar with its details.

After due consideration, a meeting of representatives of State Boards was held at Detroit during the recent meeting of the American Public Health Association, at which, after discussion, it was decided to call a meeting of the secretaries or other representatives of all State Boards of Health, in Washington, during May, 1884, for the purposes mentioned, and with the view of organizing a section devoted to State Board work in the present Association, or the formation of a permanent separate organization especially adapted to the needs of State Boards of Health. Drs. Henry B. Baker, of Michigan, and J. N. McCormack, of Kentucky, were appointed a committee to confer with and secure the coöperation of all the State Boards in fulfilling the object of the meeting, and Drs. C. W. Chamberlain, of Connecticut, J. E. Reeves, of West Virginia, and Stephen Smith, of New York, were appointed a committee on organization, to report at the meet-

ing in May. The American Medical Association meets in Washington in May; and another reason for holding the meeting in Washington, is that the representatives of the State Boards may also have an opportunity for conferring with the Senators and Representatives in Congress from their respective States, in regard to national sanitary legislation. It would seem that whenever the health authorities of all the States shall meet, discuss, and agree upon the course they will pursue with respect to yellow fever, cholera, small-pox, or any disease which endangers public health without regard to State lines or borders, and whenever all State Boards shall act in concert, considerable progress will have been made in solving the problem of what are the best methods for national action in regard to inter-State and maritime quarantine, or inspection and disinfection, as well as in the practical control of epidemic diseases within the several States of this country.

CHICAGO MEDICAL SOCIETY.

The Chicago Medical Society held a well attended meeting on the evening of November 5, and listened to the reading of an able paper by Dr. A. Reeves Jackson on the question, "Is Extirpation of the Cancerous Uterus a Justifiable Operation?" The paper is essentially the same as presented by the author at a recent meeting of the American Gynæcological Society, and synopsized briefly is as follows:

"Diagnosis of uterine cancer cannot be made sufficiently early to ensure its complete removal by extirpation of the uterus. When the diagnosis can be established there is no reasonable hope for a radical cure, and other methods of treatment, far less dangerous than excision of the entire organ, are equally as effectual in ameliorating suffering, retarding the progress of the disease, and prolonging life. Extirpation of the cancerous uterus is a highly dangerous operation, and neither lessens suffering, except in those whom it kills, nor gives reasonable promise of permanent cure in those who recover. Hence it fails in all the essentials of a beneficial operative procedure, and should not be adopted in modern

surgery. The growing tendency to bold, fearless—may I not say reckless—progressiveness in the surgical branches of our profession, would have appalled our predecessors. When we consider that some of these achievements are scarcely more than antemortem examinations, whose chief usefulness consists in demonstrating how long their owners are able to survive the loss of certain bodily organs, we ask whether there is to be any limit to these exhibitions of surgical temerity? The removal of the whole uterus is not a very novel operation. Andreas A. Cruce removed the organ per vaginam for scirrhus in 1560. Similar operations were done in the eighteenth century by Wrisburg and by Monteggia. Blundell operated in three cases in 1828, two of the patients dying, and one surviving a year, and finally dying from a recurrence of the disease.

"In 1878 Prof. W. A. Freund reported a new method, under proper antiseptic precautions, whereby the uterus could be, as he thought, more safely removed than hitherto. In the early part of 1879 he had operated in ten cases, with the result of five deaths and five recoveries; and in September of that year, at the International Medical Congress at Amsterdam, he reported four additional cases of his own. In one of these, the operation was unfinished; the other three were fatal. A later table of operations by Freund's method has appeared, including 91 cases, of which 66 died; 25 recovered; mortality, 72.5 per cent. Yet at the London Congress, Freund made the astounding statement that the operation may be undertaken as a not very dangerous one in the early stages of sarcoma and carcinoma, in which it gives promise of a radical cure. In consequence of the frightful mortality following the abdominal method, Czerny, Schroeder, Martin and others have practiced the removal of the uterus by the vagina, and thus far with better results. A table compiled by Sänger (*Archiv für Gynäkologie*, Berlin, 1883) includes 143 patients, of whom 72 per cent. recovered and 28 per cent. died. Extirpation of the uterus for cancer does not save, but destroys life. In order to show how much life has been sacrificed by it, I accept all the known fatal operations as the full number, although it is certain that there have been many more. They amount to 157 cases, 97 by the abdominal and 60 by the vaginal method.

If we grant that in all these cases the disease affected the cervix, and that the average length would be seventeen months, the calculation would show more than 222 years of life—over two centuries—sacrificed by the operation. If we consider that in many of the cases the disease affected the corpus uteri, as it surely did, in which the average duration of life is two and a half years, the aggregate amount of life destroyed would be even greater. But the writer is assured that 70 per cent. of lives are destroyed within a few hours, and 50 to 75 per cent. of the number that survive the operation, die from recurrence of the disease within a few months, and the few others who apparently receive benefit from an operation die as soon as though no operation had been performed."

In the discussion, in which quite a number participated, Dr. E. Andrews asked if the tumors of the cervix alluded to in the paper, were the scirrhus or epithelial form? Bilroth reports 11 per cent. of removal of tumors from the breast, and 33 per cent. of the lips and rectum, are successful if they are epithelial in nature.

Dr. W. E. Clarke said in his experience all patients operated upon in the cervix died within a year. One case of removal of a breast, he said, was done in 1861, and the lady recovered and remained so for nineteen years, but two years ago died of the disease. In his observation of 16 cases of amputation of the breast, all died.

Dr. R. H. Engert reported a case of cancer of the anterior lip of the cervix operated upon three years ago. The patient recovered, and at present there is no recurrence of the disease.

Dr. E. C. Dudley agreed with the essayist but thought cancer might and ought to be removed when it appears in other parts of the body, and recited a case he operated on four years ago of a cancerous tumor of the pelvis. The patient is a friend of his family, and there is no sign of a recurrence of the disease. The tumor was at once (directly after removal) examined with a microscope, and cancer cells were discovered in abundance. Some tumors occupy the middle ground bordering on the malignant, and yet they are benign. Another case he cited was where the tumor had ruptured five times in the peritoneal cavity, bring-

ing on peritonitis each time. He operated, and applied thirty to forty ligatures. He used antiseptic precautions, and she recovered. This tumor was a cyst, containing a great deal of solid tissue. It was an ovarian tumor, and yet it was what might be called an endogenous cancer. The patient was operated on three years ago, and she is in perfect health to-day; and it appears to be a permanent cure, at least it is so up to this date. But if the neighboring glands are involved, as the breast and axilla and under the clavicle, then it is a serious question about operating with a hope of cure. The uterus offers a very unpromising field for operating or extirpation, as all patients die. As the fallopian tubes are a part of the uterus, and these are not removed in operations for sarcoma of the uterus, we should not decide positively no to.

Dr. G. C. Paoli had seen many operations of this kind; two were in Ohio, and one in Chicago; some died before the operation was completed; some died in a few days, and one lived six weeks. In cancer of the breast, sometimes the tumors are proved to be fibrous; he had seen two cases of this variety in the hospital in his native country, and they both recovered, and the surgeon acknowledged them to be fibrous in character, but in true cancer it is sure to return, either of the breast or the uterus.

Dr. R. H. Engert said if a tumor of the breast is decidedly pronounced to be a cancer, she would have it operated upon and removed.

Dr. A. H. Tagert spoke of a case operated on for removal of cancer of the breast twelve years ago, and the patient is living in this city, and with no appearance of the disease returning.

Dr. D. T. Nelson hardly coincided with the sweeping statement of the paper. He thinks there is a border line between the severely malignant, or epithelioma, and sarcoma. He would operate upon sarcoma, and thought possibly it would not return, but in carcinoma, he thought there was little hope of its not returning, when removed by the knife. He thinks this disease begins as a local disease at first, and if we could diagnosticate the case early, we might operate, and if it is sarcoma, it might sometimes be cured.

Spencer Wells, up to 1881, had never operated upon a carcinomatous uterus.

Dr. Williams thought we should remove the cervix, and so much of the cervix and body of the womb as we can see to be involved, then treat the wound with bromine. He reported that some cases recovered. The vaginal method is the safest, and offers greater permanency of cure, but the broad ligaments are left in operating, so, if we can diagnose the case early, we are justified in removing it. One case of a cancer of the breast the removed ten years ago, and the lady is now living. Another case was that of a soldier, whose axillary glands were deeply involved, also the artery. The surgeons desisted from cutting deeper, for fear of death. Hospital gangrene set in, the parts sloughed off, and the man was for two years afterward in the invalid corps performing duty, and he thought, in operations for either epthelioma or sarcoma, that the chance for recovery was more favorable than that of carcinoma.

Dr. Jackson, in closing the discussion, said he feared, from some of the remarks that had been made, that he had failed to make himself understood. He believed in the local origin of cancer, and believed in its removal, if removal be possible. He objected, however, to operations which destroy more than 50 per cent. of lives, and which experience has shown do not remove the disease in the cases of those who recover. In operations for cancer, the object is not to remove a mammary gland, a pylorus, or a uterus—it is to cure a *disease;* and if this be not done, the operation is a failure. It has not done what it aimed to do, and it is none the less a failure because the patient may survive without the ablated organ for a few weeks or a few months. He had only discussed the question as to the feasibility of extirpation of the entire uterus for cancerous disease, an operation shown to be much more dangerous than the disease itself. He approved of the minor and safer methods—the curette, cautery, caustics, vaginal or supra-vaginal amputation, etc., because they were capable of doing all that could be usefully done by total excision, with comparatively little danger to life. In conclusion, he would mention a fact that was rather humiliating to surgeons, namely, that the greatest success in removal of the uterus had been ob-

tained by midwives. There were on record no less than six cases in which that organ had been forcibly dragged from the pelvis, with but a single death.

At the same meeting, Dr. J. Elliott Colburn read an interesting paper on the "Treatment of Trichiasis by Electrolysis," which was of much interest to ophthalmologists. He has treated 54 cases by this method at the Eye and Ear Infirmary and Central Free Dispensary, during the past six months, with decided improvement in about every case. The subject, while not of great interest to the general practitioner, is none the less valuable, as the many points of interest it contained are a fund of information to those making diseases of the eye a specialty; even by those specialists the operation has not been extensively practiced.

There was considerable discussion on the subject of the formation of a "Nucleus for a Medical Library." A surplus of $500 was in the treasury of the society, which might be appropriated at once for this purpose. Further discussion was postponed, but no doubt this scheme will meet with an affirmative vote ere long.

The society adjourned at a late hour. L. H. M.

The Chicago Medical Society held a regular semi-monthly meeting on the evening of December 17, 1883.

Dr. D. W. Graham presided. The scientific business transacted consisted in a disposal of two papers. The first being a paper on "Alveolar Abscess opening into the Antrum and Nasal Cavity, Simulating Chronic Nasal Catarrh," was read by Dr. John S. Marshall. It contained the following points of interest, regarding the origin and causes of ozæna, namely syphilis, struma, lupus, ulceration, caries of the bones or cartilages, inflammation of the mucous membrane of the frontal and maxillary sinuses, and alveolar abscess opening into the antrum of Highmore or the nasal cavity direct.

The origin of certain forms of chronic nasal catarrh with fetid muco-purulent discharges is not always easy to locate, and espe-

cially is this true if the latter enumerated cause is the primary seat of trouble, and opens into the maxillary sinus. Abscesses forming at the apex of the roots of the superior incisor teeth, bicuspids, or molars, may discharge into the cavities of the antrum, or nasal fossa, and range from a slight nasal discharge to a most offensive ozæna, and it is not at all uncommon to find the roots of the superior molars penetrating the maxillary sinus. Less frequently, however, the bony plate over the apex of the incisors may likewise give way, especially over the apex of the central incisor, this may occur and an offensive discharge into the nasal passages or posterior nares may so closely simulate chronic nasal catarrh as to entirely mislead the most careful diagnostician, whereas the real source of trouble may be a diseased tooth. During the past three years the writer has seen two patients, who were suffering from this form of disease, who had been treated for months as cases of chronic nasal catarrh. The sphenoidal and frontal sinuses and the maxillary antrum may each be the seat of this morbid condition and fetid discharges from the nasal passages be the result, i. e. of the accumulation of the morbid products in the accessory cavity, which becomes distended, and the overflow escapes from the little orifice into the nasal cavity. Text-books allude to this disease in a mere paragraph sometimes, and undoubtedly the subject deserves more attention than has hitherto been given to it.

Antral abscess is a much more serious difficulty than the affection just described, the former causing, at its inception, rigors and fever, and involves much more of the adjacent structures, periosteum, etc. In antral abscess the pus may be retained between the periosteum and the bone, causing absorption of the walls of the antrum, and may open into the mouth, orbit, or through the external surface, and cause hideous deformity, or extensive necrosis of the maxilla often follows, and it may extend to the ethmoid, lachrymal, palatine, and inferior turbinated bones, with cerebral abscess, unless early recognized and interfered with by surgical means.

When a dental abscess opens into the maxillary sinus, there may be danger of septic poisoning if the secretions become foul and no other outlet is present. If this should occur it will be

attended, of course, by serious constitutional symptoms. When it escapes into the nose the discharge will be unilateral, in its always being from the same nostril, and most abundant when a patient is lying upon the opposite side.

After the cases, with the symptoms, history, etc., had been cited, the paper concluded with the treatment, which consists in syringing the cavity of a tooth and the abscess through the pulp canal with warm carbolized water, 2 grs. to the ounce, once daily, and packing the tooth with carbolized cotton, and sealing it in with gutta percha stopping to exclude external moisture. Sometimes the buccal roots can be explored with a fine probe, by passing it upwards for an inch or inch and three-quarters. Water can be thrown into the antrum of Highmore through the roots of the teeth, and the fluid will escape into the nose. A tooth always needs to be extracted, if it is not already absent. Then we will discover, most likely, the pus escaping into the mouth through the alveoli, and that the ends of the buccal roots are somewhat rough, and portions already have been removed by absorption. A few weeks' time of treatment usually results most satisfactory.

The paper elicited considerable discussion. Dr. T. W. Brophy said that he had seen and treated a great many cases similar to those cited by the writer of the paper, that had previously been treated by physicians for post nasal catarrh; he also illustrated his remarks by giving a method by which he was treating a case at present, and draining the antrum through an opening into the mouth by a metal tube or canula. The patient has been under his observation for ten months, and was for four months previously treated for the nasal difficulty alone by a physician having a large practice. The case is now almost entirely well. I think the discharge of pus into the nasal cavity occurs more frequently from the incisor teeth than from the molars, and necrosis frequently results from the alveolar abscess that at first has formed at the roots of the teeth, and sometimes involves the entire upper maxilla. He was much pleased with the paper, and had been much interested thereby.

Dr. Edmund Andrews inquired of the author what form of

syringe he used in treating this class of cases, and what form of point the syringe had.

Dr. W. W. Allport stated that the paper presented by Dr. Marshall was well prepared and timely. That similar cases to those mentioned by him do sometimes occur, there is no doubt, but not so frequently that any one individual sees and treats a great many of them, as Dr. Brophy states he has done. I think that I am an ordinarily careful observer, but during my thirty-five years of practice I have seen but very few of such cases, not to exceed five or six, and I can hardly see how it is that any one man has treated so many cases similar to those mentioned in the paper, as the gentleman preceding me would have us infer that he has. Dentists frequently have fistulous openings and occasionally a diseased antrum to treat, caused by alveolar abscess. But alveolar abscess simulating nasal catarrh is met with but seldom, and I think Dr. Brophy has misunderstood the idea conveyed in the paper.

Dr. Robert Tilley stated that he had treated catarrhal troubles of the ear that had been primarily connected with the teeth, but a case had never occurred in his practice of catarrh of the nose originating from the teeth where perforation had occurred, as was described in the paper, and he took pains to examine the teeth and mouth carefully in making his diagnosis. He would like to inquire, without naming any one, if dentists had ever tried using the remedy peroxide of Hydrogen in "syringing out" this kind of pus cavity? He knew it to be an efficacious remedy for dentists to use, and suggested it as a valuable agent in the treatment of alveolar abscess. It consists of twelve volumes of oxygen in solution, and is used in full strength by oculists in Paris in treating eye affections, and he presumed it could be used in the same strength in treating these abscesses.

Dr. Brophy arose to add to his former remarks that he did not wish to be understood as saying boastfully that he had seen more cases of alveolar abscess than other dentists, as might be inferred from the remarks of one of the gentlemen who had the floor a few moments ago. He, however, would verify the statement he made at the beginning of the discussion: That he had met with a goodly number of cases of this variety, and he would at an early

period present a paper on this subject before this society, which he would be pleased to do as soon as he can have the drawings made to illustrate the facts.

Dr. Allport said, regarding the use of peroxide of hydrogen, it is coming into general use by dentists. He knows it to be an exceedingly useful remedy as he has practiced using it a good deal, and concluded by saying: The author of the paper he thought, had ably called attention to an important subject this evening, one that is generally overlooked in diagnosing nasal catarrh.

Dr. Marshall closed the discussion by describing the kind of syringe used, as one speaker had inquired about, by saying it was the ordinary dental syringe fitted with a flexible metal point. stated that the peroxide of hydrogen is in general use, although he had not used the remedy in the treatment of this class of cases; but certainly should regard it to be quite valuable in the treatment of blind alveolar abscesses. Regarding the cases he had reported he said they had previously been under the observation of intelligent and well educated physicians. The object of the paper was to call the attention especially of the medical profession to one of the most obscure causes of fœtid nasal catarrh—a cause which in a majority of cases he thought was overlooked by physicians.

The following is the substance of a paper presented by Dr. Wm. L. Axford, on "Packing-House Wounds," from observations he made during the past three years. This interesting and important topic was attentively heard, for it involves our attention as surgeons in considering the best methods to secure primary union in wounds which admit of the possibility of such union, and the execrable manner in which this class of incised wounds heal, though cleanly cut by the knives that are used in packing-houses, and the bad consequences ensuing from very slight wounds on the hands and forearm, oftentimes amounting to a mere scratch, are familiar to many of you, and the sequelæ following are in proportion to the depth of the wound, for when the skin has been cut through and the cellular tissue opened, an intense cellulitis terminating in the formation of large quantities of pus, requiring free incisions has been almost

invariably the result. From a small cut in the back of the hand, a cellulitis extending half way up the forearm is not an uncommon result, and cases under observation have occurred where the inflammation extended to the elbow. If the sheath of a tendon be opened, or the tendon cut, sloughing is the usual termination. If the wound extends deeper, and the periosteum be cut, nearly every case will be followed by periostitis with necrosis. The cause must, of course, be the septic material conveyed into the wound from knives used daily in cutting meat, which, probably, are rarely cleaned with care, and never disinfected, although they may be ground and washed daily. Wounds are of daily occurrence at some of these large houses, and from past experience I am led to think that we may expect the worst consequences to follow from the knives used by "shavers," *i. e.*, those employed in removing the finer hair from the bodies of the animals after they have passed through the "scraping machines,"(the "American hog," of course, being the animal alluded to that undergoes this sudden and complete metamorphosis.)

The wounds seem to pursue the same destructive tendency and resist antiseptic measures, as if no treatment were adopted. The treatment of wounds of this nature is, when necessary, to approximate the edges with sutures, then using freely either carbolic acid, solutions of encalyptol, or iodoform, all of which have been tried. Still union by the first intention has never yet occurred in the practice of the writer. A better plan might be to put aside the idea of securing union by the first intention, which is but problematical, and direct our measures towards preventing the inflamatory consequence by arresting the spread of the septics through the tissues, or, in other words, treat these cuts from the first as poisonous wounds, and try to prevent the further invasion of the septic material. To do so, if called immediately, apply thoroughly to the cut the actual cautery as the best means of destroying the poison. This heroic method, the writer is convinced, will diminish the suffering of a patient, and lessen the actual inconvenience so far as time of recovery goes. Perhaps, if we inject antiseptics, such as carbolic acid, tincture of iodine, or other solutions into the tissues about the wound they might take the place of the actual cautery, but their efficacy as adju-

vants to the treatment by the cautery in fresh wounds can be better tested by using them after the more heroic method of searing the surface first has been done.

If, however, some time has elapsed since the injury before we are called, it would be more advisable to dispense with the cautery and trust entirely to the injections, and environ the wound by a layer of some reliable antiseptic dressing.

Among those who discussed the paper was Dr. E. Andrews, who stated that he was frequentlv called to attend severe cases, the result of so-called "packing-house wounds." Some patients are more violently poisoned than others; he recalled a case of a man whose foot had been injured by a machine that is used in an "offal factory" to grind the bones of the animals slaughtered there, and the man's foot was completely destroyed. The leg was at once amputated, but in twelve hours the flaps mortified, and the lower half of the thigh was distended with gas; in another twelve hours the entire thigh was tympanitic, and in a few hours more the man died, not so much from shock as from being poisoned to death. Another case he saw was where a man had been cut by a cleaver (used in packing-houses) on the lower portion of the "shin"; it pursued the same course to a fatal termination. The juices that oozed from the stump after he amputated the leg contained large numbers of bacteria, and the case presented what he termed septicæmia with a vengeance. He also gave the history of a third case with the same final disastrous result—death. Some authors termed this traumatic gangrene, others, gangrena septica. It is a virus, but I do not think many of the hogs have this virus.

Dr. Robert Tilley thought that no advantage could be gained by using a cautery in these cases if amputation proved to be of no avail, and he thought a simple hot poultice would be the better method to destroy the septicism, because bacteria do not thrive at a temperature a little above that of the body, or to keep a hot appliance continually to the wound. He had treated a number of cases of wounds received in soap factories, none of which had septicæmia.

Dr. Graham had seen a number of chronic cases of the kind of which the paper treated, and thought part of the virulence

is due to the way this class of people live, as they live in a vitiated atmosphere at their homes, also the peculiar modes of the individuals in their hygienic care of themselves.

Dr. Axford thinks the cause of these poisonings is due to the knife being dipped in blood nearly constantly by butchers, and it instead of the hog, is the carrier of the virulence, at least in most of the cases; he is assured of this, and we should be on the alert for the after consequences which are most sure to arise, as he is convinced that every man wounded at these places by the knives used there, is actually poisoned.

L. H. M.

DR. HORATIO C. WOOD has at length severed his connection with the *Philadelphia Medical Times*, and its management now falls into the hands of Dr. Frank P. Woodbury, of Philadelphia. Dr. Woodbury is well known to the profession of the country at large as a gentleman who by education and experience as a journalist, is well qualified to sustain the duties which his distinguished predecessor has laid upon his shoulders. The *Philadelphia Medical Times* is one of the most valuable of American medical journals, not merely in the excellence of the editorial work it betrays, but in the character of those who contribute to its columns.

THE PREVENTION OF HORSE ACCIDENTS.—Mr. C. C. Baird, of the Dick Veterinary College, Edinburgh, has invented an india-rubber frog-pad for fitting into the heels of the shoes of horses, with the view of preventing the animals from slipping and falling on the causeway. The invention is exceedingly simple, and will be of great value to medical men and others who drive horses, especially on asphalt and in frosty weather. The pad can be removed in the evening and replaced in the morning. A set of pads, it may be added, is expected to wear out two sets of shoes. The trial of the invention, we believe, has fully borne out the statements of the inventor as to the merits of the apparatus.—*Medical Press.*

Foreign Correspondence.

CHIHUAHUA, MEXICO, November 17, 1883.

TO THE CHICAGO MEDICAL JOURNAL AND EXAMINER:

This city of 20,000 souls, the capital of one of the Montezuman States, of unknown age, is situated among the "everlasting hills," that richly abound in ores of copper, gold, and silver; and, notwithstanding the encroachments of a higher civilization and more elegant designs in architecture, still preserves, intact, all the elements and characteristics of the typical Aztec *ciudad* of a hundred years ago, including the omnipresent one-story quadrangular adobe building, enclosing a green or paved plaza, which, among the wealthier, is often cooled by the fountain's spray, shaded by semi-tropical foliage, and perfumed by the breath of many flowers. There the family lives, shut out from the world by the immense carved wooden door overhanging the edge of the paved street, and by the iron grating of the windows seen everywhere, which give to the stranger, at first sight, the impression of being in the midst of a vast prison.

Many Americans are now coming in—many adventurers and many in search of health. The Mexican Central Railroad is now completed over 200 miles below here, and by April 1st, 1884, the gentlemanly officers inform me, it will be completed to the City of Mexico, a distance of 1,250 miles from Paso Del Norte. And as the climate in these parts, together with the scenery, affords the strongest allurements to those in quest of health, rest, and pleasure, it is not going too far to say that the cleanliness, smoothness, and dustlessness of this road, combined with elegant

and marvellously clean stations and general offices, rob railway travel of its terrors. The cars are light and comfortable, and and move so smoothly that riding on the fastest trains is not irksome. The road in all its appointments is unique, and the civilizing influences of the North will surely but slowly follow it to its terminus. Here, at an elevation of about 4,000 feet, are not found extremes of temperature, nor "squalls" of weather. The thermometer will register from 30° to 108° F., with a mean annual temperature of 65°, and when the days are warmest the nights are always cool. Many at this season go lightly clad—barefooted; and to-day a six-year-old boy, by a neighboring brook where his mother was washing clothes with the soap weed, played joyfully in a state of perfect nudity. The atmosphere is dry and exceedingly light and exhilerating, and the appetite of everybody is good and readily satiated with fried quail, deer, antelope, etc., at the rate of $18 per week, *al casa Americana*. . There is not the least doubt that the words of an old U. S. Army surgeon, of ten years residence in the country, are true: "When this country is better known, it will be the grandest resort on the American continent for invalids, as dyspeptic, consumptive, and neurasthemic patients and over-worked professional and business men, who can here, in a very short time, regain their health and recuperate their wasted energies." Here, on the plateaus, the epidemics of childhood, of the temperate regions, do not occur so frequently, nor are they so difficult of management, being less malignant. Diphtheria and scarlatina are rare. Isolated cases of small-pox occur frequently throughout Northern Mexico, yet the disease has been epidemic but once (6 years ago) in years. Vaccination is compulsory, and the Mexican Central road has now a physician vaccinating all the employes of the road, though no small-pox exists along the line. Yellow fever, so fatal on all the coasts, is unknown here, and the occurrence of true typhoid fever is rare, and when found is usnally in an American subject. Tape-worm is very common here and about Paso Del Norte, 225 miles north, and the cause is variously accounted for by competent medical observers. One of these, during the past two years, removed 17 worms, tinea soleum, from as many patients, "*every one* of whom was fond of

and freely ate, rare-cooked native beef." Another assigned the cause to the frequent use of mutton, while a third one observed that the worm occurs most frequently among the peons and the poorer classes, who are in the habit of eating great numbers of rabbits. All may be right; but as rabbits are known to contain great numbers of cysticerci, there is no doubt that they are pre-eminently the cause of trouble in this country. The usual remedy is male fern and pumpkin seed. Of course, Mexico has been celebrated for the frequency of the venereal diseases, and, if one may judge by the pink scleroticas seen on every hand, and by the declaration of resident physicians that "Every other man you meet carries his own souud or catheter," she certainly deserves and maintains her unenviable notoriety.

"Stone in the bladder," said Dr. Frank Paschal, of this city, after eight years experience, "is quite common." The doctor is a very celebrated surgeon and lithotomist, and is justly entitled to his reputation, as he has operated for stone (mostly by the lateral, but sometimes by the median incision) seventeen times on patients, from 3 to $3\frac{1}{2}$ years of age and up to 70 odd years, with but two fatal results, and these died from exhaustion, the operation having been too long delayed. Dr. Paschal informs me that the average Mexican will stand a capital surgical operation to which an American would quickly succumb, with little or no shock, and that, in so much, is the field of surgery widened here. In midwifery, the frequent use of the forceps is demanded, and yet uterine lacerations and displacements are not very frequent. Ovarian disease is rare throughout Mexico. Only sixteen ovariotomies have been performed in the county, and only two of them outside of the capital, and nearly every one proved fatal. Uterine cancer is exceedingly common, and its frequency is often charged up to the effect of a slightcervical laceration occurring in a syphilitic constitution. The University of Mexico dispenses the sciences of the capital in Spanish and French, and there are published in the whole country but three medical periodicals.

And now, lest something may have been said, unintentionally, whereby some young professional reader might be induced to seek a location and a national reputation like our most worthy

and esteemed countryman, Dr. Paschal, it may be well enough to consider other things besides the following: And, 1st—The average Mexican has neither forgiven nor forgotten America's mean acts of 1846–7. His ways and thoughts are not your ways and thoughts. He is naturally suspicious, and though he may envy *los Americanos*, he is jealous of them and their inroads upon Mexican traditions, customs, and superstitions. "It takes two days to distribute one day's mail" in Los Coreos. Drugs are mostly imported and are enormously dear, being subjected to national, State, county, and municipal duties—the national duty alone increasing the cost 100 per cent. (nearly) over American prices. But now, if you will come, proceed thus: Send your diploma to the United States (American) Secretary of State, asking him to endorse it as genuine; then to your nearest Mexican Consul, who will likewise sign and send it to the Governor of the State you intend visiting, who, having examined, approved, and endorsed it, will send it for like action to the President of this Republic who may return it to you. You will now present yourself for examination, and not only prove a knowledge of *spoken* Spanish, but also a knowledge of the Mexican's every-day names of drugs, as well as their chemical and botanical names. The Board may examine in any or all the branches of medical science. Having been approved, you will then find some elegant senors, senoras, and senoritas, and take up your abode among a unique people, but in a magnificent country, full of grand scenery and grand possibilities, where invigorating climate will come to your rescue, enabling you to realize the effect on over-worked, broken-down constitutions of Dame Nature's magic restorative powers; for, after all, we must admit *en su poder nosotros podemos ganar la victoria.*

DR. DAVID W. YANDELL was recently elected an honorary member of the London Medical Society. We heartily congratulate the London Medical Society on its ability to secure so honored a name for its roster.

Domestic Correspondence.

BOSTON LETTER.

BOSTON, December 20, 1883.

This city is amply supplied with hospitals and dispensaries, and it may not be amiss to give you an idea of the Boston Dispensary and its new building, it being one of the oldest in the country, having been organized in 1796. The apothecary of the Dispensary was directed "to procure a board to be placed at the front of his shop, with the words 'Boston Dispensary' painted thereon, with such other device as may be congenial to the institution, and corresponding with his ideas and fancy." He selected that of "The Good Samaritan," and since that time this symbol has been used. In a report of the institution for 1858 is found the following: "Tradition says that the artist, in his anxiety to illustrate the full import of the scene described in Luke x. 32, painted the Levite in the act of passing him by on the other side" When the work was finished, the managers detected in the Levite so striking a likeness to a certain clergyman of the town, that the figure was effaced.

The support of the institution is from the interest on its funds and annual subscriptions. Until within a few years all medicines were dispensed free of charge. With some misgivings the managers ordered a fee of 10 cents to be charged on all medicines dispensed, of course leaving it open to the physicians to remit this fee in cases of absolute want. The result has been watched with interest, and instead of a yearly deficit, a third source of income has been added. The original intent of the institution was to care for the sick at their own homes, and from 13,000 to

14,000 persons are annually provided for in this manner; but an average of 84 patients are treated each day at the "Central Office," in the various special departments, and this now offers a large field of observation, which is being utilized in clinical instruction by the "visiting staff." The work of the "Central Office" was temporarily removed to Washington street, while the new building was erected on the site of the old building, at the corner of Ash and South Bennet streets. The building is very nearly square, the dimensions being 65 feet 8 inches by 65 feet 4 inches, with an entrance porch on Ash street. The walls are brick, with sandstone trimmings, and with the unique arrangement of the chimneys, the gable corners, and slate-hipped roof, we have an effective design. The building contains a basement, first and second stories, and a commodious attic. The basement contains the furnaces, a separate boiler for supplying hot water to the various parts of the building, the coal bins, and a completely fitted laboratory for the compounding of pharmaceutical preparations. The first story has a hall 22 feet wide, which runs the entire length of the building, and is used as the waiting-room for patients, on one side of which are the dispensary proper, trustees' room, laboratories, and a consulting room, and on the other side is divided into five consulting rooms for the physicians in attendance. The second story contains a hall of similar dimensions to the one below, with an ample and attractive staircase leading thereto. On one side there is a large, unfinished apartment, an operating and lecture room; on the other side, five consultiug rooms for the physicians. The attic contains the janitor's apartments. The finish throughout is of ash, with floors of the best Southern pine. Soapstone sinks and hot and cold water are placed in every room. The building, in point of construction, is really second to none in Boston. Ash settees for patients, and a reproduction of the old Plymouth chair for the physicians, make the furnishings comfortable and ornamental.

The friends of the medical education of women have again made an effort in their behalf. When the "Medical School" moved into its new building, an appeal was made to "the faculty" to allow the old building to be used for a school for the medical education of women, a sort of "annex" to the present "med-

ical school." "The faculty," however, declined, considering that the movement would not have a sufficiently strong financial backing. The Dental Department of Harvard University now occupies the old building.

Kairine, the new antipyretic, has been used at the City Hospital by several gentlemen. The drug reduces the temperature certainly and rapidly, but in two cases produced alarming symptoms of depression.

The various medical societies are fully engaged in their winter's work, and a medical man's evenings might be almost constantly occupied in attending the various meetings. The division of the "county society" into sections is working very advantageously, and some good work is the result. B.

TREATMENT OF DENTAL CARIES WITH SOLIDIFIED CREOSOTE.

Creosote is a popular remedy used for the pains caused by caries of the teeth. As its excessive fluidity frequently occasions bad accidents in the mouth of the persons that use it, it can be solidified by the addition of a certain quantity of collodion, 10 grams to 13 grams of creosote. This mixture is more manageable than the simple creosote, and forms a varnish which closes the orifice of the tooth and prevents the air from influencing the dental nerve.—*Revue de Thérapeutique.*

CHLORIDE OF GOLD.

Mr. Martineau prescribes the following solution, in doses of two to three teaspoonfuls for the most obstinate cases of syphilis and tertiary ulcerations:

Chloride of gold	1 gram.
Chloride of sodium	1 gram.
Distil. water	1 litre.

He reminds us that the chloride of gold and of sodium have been lauded for the sharp pains of ataxia, and that Bazin recommended them in scrofula.—*Le Praticien.*

Editorial.

On Sanitary Spelling Schools, with some Incidental Remarks concerning Dirty Linen.

The report of the proceedings of the Illinois State Board of Health at its quarterly meeting, October 18–19, 1883, affords an interesting illustration of the difficulties which beset such a body in its efforts to accomplish by forms of law what cannot be properly reached by law.

A considerable portion of the report is occupied by an opinion furnished by the Attorney General of the State, in reply to certain questions raised by the Board concerning prosecutions for a violation of the law of 1877. This official states that this law "can only be maintained under the theory that it is a proper exercise of the police power of the State;" otherwise it "would be an unwarrantable interference with private rights." This "proper exercise of the police power" he further assumes to be "the preservation of the public health from the experiments of quacks and unqualified persons."

As we have shown in a late issue, Mr. Huxley has abundantly proved the folly of any such effort for the preservation of the public health. Mr. Herbert Spencer has also presented the philosophical grounds of such failure, showing that it is inevitable from the very nature of things. Observation of the course of events in our own State during the past six years, brings to light a great amount of evidence that government intervention for the protection of people against quacks simply defeats itself. The impostor merely changes his garb, and pursues his old game without hindrance. He takes pains to arm himself with the proper

credentials, signed and sealed by the Board of Health, and to these he can always refer the public as evidence of orthodoxy and competence. In this way hundreds of ignorant and unworthy fellows have been presented to the public as worthy of confidence. The regular physician, who has patiently qualified himself by study and experience, is no better before the law than any unscrupulous humbug who is "recognized" by the Board of Health. Only a few of the stupider sort of quacks run any risk of molestation. An occasional prosecution of these is attempted, creating thus an impression that the Board of Health is doing something to purge the profession, but the practical outcome of such activity has no terrors for the great army of quacks who pursue their game under the protection of the law. This is inevitable, and therefore cannot be a matter for regret. It should, however, be sufficient to open the eyes of those who still believe in the ancient superstition that legislation is the all efficient remedy for the ills of life. As Mr. Huxley has well said, it is much better for people to form the habit of taking care of themselves, than for the State to disarm their suspicions by professing to protect them against quackery. The quack merely learns to keep within the letter of the law, and finds his position established by the endorsement of the State, upon a level of respectability which gives him an advantage against the citizen which he could have obtained in no other way. Our law, therefore, becomes a law, not for the protection of citizens against quackery, but, on the contrary, a law for the protection of quacks against the natural suspicion of cautious citizens. According to the Attorney General of the State, therefore, this law is an "unwarrantable interference with private rights," since its *raison d'etre* has no existence.

Another evidence of the injustice of our present law is furnished by the manner in which it requires the Board of Health to deal with offenders against its provisions. If we are rightly informed, the mode of action is briefly this: The Secretary of the Board of Health decides to make a descent upon some particular offender. He employs detectives to "put up a job" upon the rogue, who generally falls an easy victim to this method of attack. The Secretary examines the evidence thus obtained, and if it seems sufficient, he reports to the full Board at its next meet-

ing, that such or such a physician has given cause for revocation of his license. The Board must as far as possible finish its business in its hours of session. Its non-professional members may be supposed to know nothing, and to care less, about such things. The medical members of the Board are governed by the "courtesy of the court," or by a sense of satisfaction at the thought of making an example of somebody. As a matter of fact, the whole thing is finally left to the Secretary, and whatever he may recommend is tolerably sure to be sanctioned. The criminal then finds himself without any standing in court if he undertakes to continue his practice, because he is then prosecuted, not for unprofessional conduct, but for practicing without a license, so that the justice of his first condemnation cannot be made a question for legal investigation.

Now, the satisfaction with which every right-minded physician contemplates the summary overthrow of an impostor and a charlatan, should not blind him to the enormous injustice of the proceeding just outlined. We hope that there is some mistake in the case, and that the Board of Health may be able to take a position different from that in which it seems to be now placed by the law in its present form. If such be the real mode of dealing with offenders, justice can be obtained from the Board only at its pleasure, for such justice must be secured from a court where the offices of detective, prosecutor, judge and jury are all united in one person. It may be proper to have a public detective set over the medical profession, but he should not be allowed also to act as judge and executioner. All offenders against whom evidence may be secured should be presented by the Board of Health to an independent court of law for adjudication of their offenses. Otherwise, where can be the security that the office of Secretary shall not be employed as a means of injustice and oppression? The ecclesiastical courts which existed in England during the Middle Ages, form the only parallel, concerning which we have any knowledge, to the tribunal of our Board of Health. Organized by the best of men for the most noble and beneficent purposes, those courts became the agents of one of the worst forms of arbitrary tyranny the world had ever known. Such

will be the inevitable result if our own Board of Health should be suffered by our apathy to evolve its natural conclusions.

A similar objection lies against many of the measures proposed by the Board of Health in the matter of medical education. The best teachers of medicine will not yield to others in a desire for the progressive elevation of the standard of medical education. But there must be evidence that the line of action marked out by legislation is judicious and likely to be successful, before there can be a cheerful acceptance of everything that is forced upon the medical colleges, with or without their consent. It is very evident that there are two sides to this whole question of medical education. The experience of our English brethren shows how difficult and delicate is the proper adjustment of the matter. One would, therefore, suppose that before initiating any new de-departure in this State, our Board of Health would at least have consulted with the members of the medical corporations most likely to be affected by their action. In Great Britain, when any legislation affecting medical education or the interests of the medical profession, is undertaken, the whole matter is first subjected to the most searching inquiry by the representative members of the bodies interested. It is ardently debated by all the medical journals throughout the Kingdom; the "fierce light of parliamentary discussion" is poured like a flood upon it; every effort is made to secure the rights and privileges of all parties concerned. But in this State nothing of the kind is attempted. A little knot of irresponsible gentlemen, some of them physicians and some of them not—all with little or no experience in teaching scientific medicine—lay their heads privately together, and, without asking advice, or even an expression of opinion from any one, they proceed to dictate to the medical colleges in matters affecting some of their most vital interests. In this way they have seized upon a vantage ground whence they can inflict irreperable injury upon any institution which may fall under the ban of their displeasure. Their reports are garnished with the names of colleges which are "not recognized by the Board"—names which are paraded with evident gusto, very much as an Indian brave points to the scalp locks dangling at his belt; and we all admire and applaud the good work of "purging the profession."

But a little investigation reveals the fact that this action is entirely arbitrary, and that no medical college, however venerable or excellent its record, is safe against any assault which the Board of Health may choose to bring against it. Of course it is very easy to insist that there is no danger of any harsh or unjust treatment from the Board, but this does not remove the fact that there exists no legal barrier between the Board and any medical college whatsoever. A most conspicuous example of the consequences of this fact is exhibited by the indifference of the Board to all conference with the medical colleges of the State in the matter of medical education.

An excellent illustration of the unwarrantable character of certain of the exactions made by the Board of Health is contained in the admission by the Secretary concerning their effects upon medical colleges which have adopted a three years graded course. The only way out of the difficulty, which the Secretary would propose in a case which actually presented itself, consisted in a virtual evasion of the rules adopted by the Board. As a matter of fact, if the Board should attempt to enforce their own rules it would soon result in the practical crippling of any school within the State which might adopt the three years' graded course. How can this be reconciled with a judicious zeal for the elevation of the standard of medical education ?

Again, in the matter of preliminary qualifications for admission to the medical colleges of the State, it is difficult to see how the action of the Board is likely to accomplish any good result. There is no unanimity of opinion regarding the value of such preliminary examinations as are required. We have already, in our last issue, quoted the opinion of Prof. Huxley; and the utterances of such a man as Prof. Knapp (see his recent inaugural address, published in the *Medical Record*) are of the highest importance in this connection. The whole matter is complicated by so many conflicting interests, growing out of the independence of State governments, rendering impossible any concerted action throughout the Union, that our State Board should undertake nothing without the fullest consultation and most cordial coöperation with all the colleges in the State. On the contrary, the Board, by its arbitrary action, is simply hindering the natural and healthy de-

velopment of the medical colleges, and, under the plea of raising the standard of education, is only driving timid students out of the State, into inferior schools, where they cannot secure anything like a metropolitan education. The fledgling medical colleges upon the frontier can well afford to pay our Board liberally for this kind of discrimination in their favor.

The insignificance of the matters which chiefly occupy the Board is further shown by the prominence given to the subject of spelling. Nearly three pages of this brief report are filled with samples of letters received from would-be medical students and frontier physicians. Previous reports have been filled with similar specimens. We would suggest that this subject has now been sufficiently treated by the Board, unless they wish to be considered a spelling school. Of course, there can be no harm in exhibiting such letters to the different members in private sessions of the Board. College Faculties have been known to amuse themselves for a few moments with similar effusions from a newly plucked candidate ; but that is something very different from the parade of such errors before an unprofessional public. The Board should remember that their correspondence is chiefly with the riff-raff of the medical profession, and with such young students as do not know any better way of obtaining information. It is, therefore, to be expected that their correspondence will be unusually fertile in examples of bad spelling and feeble grammar. Every one who is acquainted with the young men who compose the classes in our respectable medical schools, knows that such errors are exceedingly rare among them at the present time, whatever may have been true when the medical members of the Illinois State Board of Health were students. It is, therefore, a very injudicious thing to make so much of a little matter as has been done in this and in preceding reports. They are widely circulated, and are copied into the newspapers, giving to the general public the impression that physicians and medical students are, as a rule, exceedingly illiterate. For example, a late number of the *London Medical Press and Circular* made a quotation in its columns from the reports of the Illinois Board on the subject of spelling; and if, as a result of the publicity thus acquired, a large proportion of the practitioners in Great Britain do not conclude that

most American physicians do not know how to spell, they will certainly exhibit more judgment than they have usually done in forming opinions as to this country and its inhabitants.

In this way public opinion is led very far astray, and the medical profession suffers correspondingly in the popular estimation. Dirty linen should be quietly washed at home, instead of being flaunted in the face of every passer-by. "It is an ill bird that fouls its own nest," is an old saw that should not be allowed to sink into oblivion.

We remark, in conclusion, that the periodical reports of the Board produce the impression that very little work of a strictly sanitary character is occupying its time. Mousing after irregular practitioners, "steering" medical students, nursing their pet medical colleges, and stuffing the newspaper reporters with Falstaffian narratives of their combats with the quacks—these seem to be the favorite pursuits which arouse the enthusiasm of the authors of these reports. The question of the particular value of such work to the general public must inevitably at length arise for discussion. The consequences of such discussion will not be averted by anything short of a reformation of our present State law.

CANADIAN MEDICAL DEGREES IN ENGLAND.

In a late number of this journal, we called attention to the fact, that while Canadian physicians are able with insignificant restrictions to remove to this country and engage here in the practice of medicine, the Canadian laws regulating such practice in the dominion are such as to practically exclude physicians having American diplomas from similar privilege.

A striking illustration has just been furnished of the position sustained in Great Britain by the "royal" medical institutions of the Dominion.

It seems that a Dr. Chas. Empy, whom our English friends across the water introduce to the public as "Mr." Empy, having been educated in Canada, obtained a degree of M. D. from the Royal College of Physicians and Surgeons, in Kingston, Ontario. He removed to Yorkshire, England, and there became assistant

to one Dr. McNab of Crosshills, agreeing not to practice on his own account in that neighborhood. It soon, however, became convenient for the Canadian to cancel or in some way to evade this agreement, so as to begin the practice of medicine and surgery there on his own account.

A jealous Briton was not long in giving alarm to the neighborhood. In a letter to the *Skipton Pioneer*, signed "Veritas," (how often has this specious name been used as a cloak beneath which mortal stabs have been inflicted upon unsuspecting breasts!) it was pointed out that "Mr." Empy's name "is not, and never was, upon the medical register; and that he had, therefore, no right to assume the title of Doctor nor to practise as a physician and surgeon." "Mr." Empy then began criminal proceedings for libel against the unfortunate *Pioneer*, which resulted, after a prolonged argument before the bench, in the dismissal of the case against the alleged libeller.

In reviewing the points of this case, as they have attracted some attention in Great Britain. it is noticeable that the medical press for the most part take the ground, that "Mr." Empy was simply an unfortunate man. They admit, as indeed they must in the face of the law, that no one can now become entitled to practice medicine in the United Kingdom who has not obtained the requisite degrees in that kingdom.

With the wisdom, the justice, or the necessity of such a law, we are not now concerned. Neither shall we take occasion at this time to express our sympathy with "Mr." Empy, for the hardship which his experience as a practiser in Great Britain has brought to him. It is the "Royal" College of Physicians and Surgeons of Kingston, Canada, for which we mourn. Has it come to this, that that which the Canadians call "royal," is such for the Dominion only? Is the "royalty" in which our Canadian friends take such keen pride only, after all, a species of pseudo-royalty, which does not hold good in the presence of the genuine article on the other side of the Atlantic?

If this be so, perhaps it would be as well to change these titles so as to have them read "Royal for Canada Only."

"CRITICISING THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION."

Several of the smaller medical periodicals in this country have thought it proper to call attention in a public manner to the columns of the *Journal of the American Medical Association*, which have exhibited in the past a number of blunders, some trivial, some gross enough to make one blush for the knowledge which printers and proof-readers display of even the common words in our mother tongue. The *New York Medical Record* of December 22d, 1883, charitably declines to publish a letter from a Connecticut correspondent severely commenting on the same facts.

We should not have spoken upon this point if the editor himself had not thought fit to make a semi-humorous response to one of his critics. What we have to say may be set down in very few words. We have acutely suffered, as what editors have not, from errors apparently of the very grossest ignorance, for which we were not in any way responsible. The *Journal of the American Medical Association* is in a position to command the respectful consideration of every fair-minded member of the medical profession in this country. It has just completed the first year of issue, and if its young critics will take the pains to look over the first year of such a journal, for example, as the *London Lancet*, and amidst its typographical and grammatical errors, peruse the accounts which it contains of the movements of the British court, and the latest theatrical representations, we think he will look more leniently on the facts in the present case.

The *Journal of the American Medical Association* is not the property of its veteran editor. It belongs to the American Medical Association. It does not appertain to a large publishing house, nor to a medical school, nor to a wholesale drug manufacturing firm, nor to a man with an enemy to injure or a scheme to promote. It belongs to the profession of the country; and, being in this respect quite singular, we entertain for it a feeling of respect and admiration, which several dozen more typographical errors could not destroy. We call on every man in the country who would like to see the profession represented one day by a thoroughly independent publication of its own,

fearless of every crusted abuse and incorruptible by the wealth of any corporation, to support this journal by financial and moral aid. It is in its first and weakest stage. It is as sure to become in the future what its best friends desire it should be, as the members of the profession it represents are sure to advance in the cultivation of science.

We beg its critics to wait; and we beg also its patient editor to refrain from answering them. We look to see its columns present each day more of a national and less of a local character; and we hope to see it before long repeating the utterances of the very best men in every part of the country.

THE *Universal Bibliographic Review of the Medical Sciences*, with an annual alphabetical index indicating the articles contained in special journals, and the works published in every language and in every country, methodically classified according to the subjects discussed, followed by an alphabetical list of authors, is announced as a monthly publication about to appear under the management of Dr. Ote. Meyners D'Estray.

The object of this review is to enable the practitioner and the author to turn at once to the sources which they desire to consult upon any subject whatever.

The *Bibliographic Review* will form every year a handsome octavo volume of at least 600 pages. The price of subscription is 30 francs annually. In order to subscribe, address M. B. Grémiaux, General Secretary, Place Saint-Michel, 6, Paris.

NUMBER OF BIRTHS IN FRANCE.

During last year there were 970,843 births, of which 961,203 were simple, that is, there was birth of a single child; 9,333 were twins, and 107 were triplets. Among the simple births, 829,440 were born alive, and 40,763 were dead born. Of multiple births, 205 infants were born alive, 116 dead. Therefore, it can be seen that the twin births gave about three times more dead born than the simple births, and that among the multiple births the proportion is nine times greater.—(*Le Praticien.*)

Reviews.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF DISEASES OF WOMEN. By GRAILY HEWITT, M.D. London, F.R.C.P., etc., etc. Edited with Notes and Additions by Harry Marion Sims, M.D., New York. A New American from the Fourth Revised and Enlarged London Edition. With 236 Illustrations. Bermingham & Co., New York: 1883. Two Vols., each $2.25.

Dr. Hewitt needs no introduction to American readers. His work on the Diseases of Women has been conspicuously before the medical public for twenty years. Its first edition appeared in October, 1863. It has been enlarged with each reissue, till its present appearance is in two volumes of over 500 pages each. Every gynæcologic subject is treated in Dr. Hewitt's charming and forceful manner. To ripe scholarship, he has added an extensive and varied experience, and it is this happy combination that makes Professor Hewitt an authority in gynæcology. The chapters on Cancer; the Hystero-Neuroses; the Abnormalities of Menstruation, and the Diseases of the Ovaries, are especially interesting and instructive. Fourteen years ago, the writer heard Professor Hewitt lecture on uterine flexions and displacements, and saw him adjust many pessaries, and was greatly impressed with the extreme readiness with which he selected and adjusted the latter. Upon this branch of the subject we may turn to the fullest chapters in the work, with the assurance of reading the most complete exposition of it in any language. Professor Hewitt is the especial advocate of the mechanical cause of uterine disorders. This belief is defended and advocated most elaborately.

The work is well issued, and will be an advantage and an ornament to any library.

? QUIZ COMPENDS ? No. 6. A Compend on Materia Medica and Therapeutics, With Especial Reference to the Physiological Action of Drugs. For the Use of Medical, Dental and Pharmaceutical Students. Based on the Sixth Decennial Revision of the U. S. Pharmacopœia, and Including many Unofficial Remedies. By SAMUEL O. POTTER, M.A., M.D., Acting Assistant Surgeon U. S. Army. Philadelphia: P. Blakiston, Son & Co. 1883. Pp. 141.

A most excellent work for students. Preceptors cannot put into the hands of their students any book that will so well drill them in the subjects of materia medica and therapeutics, as will this small volume. Brevity of statement is one of its principal features. At the same time, the essentials of the subjects have been kept in view. Each drug is methodieally handled. First, its materia medica is given; then its official preparations. Afterwards follow its physiological action and therapeutics. Altogether, it is the completest "quiz compend" extant.

SEPULTURE: Its History, Methods and Sanitary Requisites. By STEPHEN WICKES, A.M., M.D., Author of "History of Medicine aad Medical Men of New Jersey," etc. Philadelphia: P. Blakiston, Son & Co. 1884. Pp. 156.

Its table of contents enumerates the following subjects: History of Sepulture; Ancient Customs and Methods; Sepulchres; Interments Among the Greeks; Customs Among the Romans; Persian Burial; North American Indian Burial; Early Christian Burial; Animal Putrescence; Malignant Disease from One Corpse; Saturated Soil of a Graveyard Disturbed; Intramural Interment in the United States; Yellow Fever; Asiatic Cholera; Pestilence; Rural Cemeteries; Coffins for the Dead of Country Graveyards.

The author has evidently spent a vast deal of time in collating the facts that he incorporates in this volume. It is one of the outgrowths of the agitation of the subject of cremation, and is assuredly a most interesting and instructive work.

Original Translations.

ON THE TREATMENT OF EMPHYSEMA IN INFANCY.—BY DR. L. FURST, OF THE UNIVERSITY OF LEIPSIC, TRANSLATED FROM THE GERMAN, BY EDWARD SYDNEY MCKEE, M.D., CINCINNATI, OHIO, FROM GERHARDT'S HANDBUCH DER KINDER-KRANKHEITEN.

The pneumatic method may be described as altogether the most efficient in the treatment of the emphysema of adults of a grade not too far advanced. For reasons, however, which are to be sought in the difficulty with which are executed certain technical details, it may be said to be as yet far less efficient in the treatment of the same disease in children.

The difficulty, however, to which reference is made, is soon seen to be by no means formidable. Many of the obstacles it involves have already been surmounted; all promise to be soon levelled. When the technical details of the pneumatic method are more widely known and the results it can accomplish more generally recognized, it is safe to say that the time will arrive when as soon as an emphysema of the lung of a child is recognized, it can be relieved.

This strong assertion seems to be at variance with the view expressed by Vogel, that no diagnosis and therefore no therapy is possible in such cases. Certain it is that Vogel's view is not to be entertained in cases of simple alveolar ectasia without great tissue change.

Complete and true emphysema can not be forced to recovery, but here may yet be attained, through a judicious pneumatic treatment, a mitigation of symptoms and a lengthening of life—and such emphysema occurs seldom in children.

The difficulty of treatment in children lies in this, that in fact the process is not recognized as early as is necessary for restoration of the elasticity of the lungs. So that the more severe the primary trouble and the consequent injury to the organism of the lung thus rendered little capable of resistance, the greater the barriers to the success of the therapy here described.

Finally the awkwardness of little children, their restlessness and resistance to all mechanical treatment to which they are not accustomed, as also the difficulty of bringing them to exact, regular, productive in- and ex-piration, antagonize not a little the success of the treatment. From this we can get a hint that we cannot too early work prophylactically, especially in diseases which are wont to run into alveolar ectasia; and that on the other hand when we can make out lung emphysema, we dare lose no time in doing something for its relief. First for consideration is the indication to treat the primary trouble energetically, and above all with circumspection, to remove all hindrances to breathing, to remove catarrhal secretions and allay irritating coughs. These, it is well known, favor the origin of alveolar ectasia. But if such have already appeared, the indications are to direct treatment toward the disturbed relation between the inspiration, expiration and the lung capacity, and this alone on the plan of the pneumatic method. The numerous expectorant and emetic medicines hitherto employed for this purpose have never been followed by radical results, and only resulted in loss of time, while conditions, such as atelectasia, bronchial catarrh, etc., could have been in the same time improved by the pneumatic plan of treatment, and other cases complicated by difficulty of inspiration (croup, bronchitis capillaris, etc.) are remarkably improved to a great extent. In many cases a symptomatic treatment seems to suffice. In atelectasia from rapid unfolding of the embarrassed lung, in catarrh, in efforts to lessen secretion and to avoid the recurrence of laryngeal, tracheal and bronchial stenosis in croup, foreign bodies, etc., the fastest possible restoration of the passage of air in whooping cough and such spasms of coughing by the most careful management of the same, briefly, all primary troubles must react at the right time to favor the origin of alveolar ectasia. One must be on the lookout in pneumonia, in pleu-

ritis of complete retrogression, and in every case of disease of the respiratory organs, and remember that a permanent emphysematous condition occurs as well in the lung regions concerned, as in those neighboring, if one does not prevent in time a lessening of the active lung capacity, an insufficiency of the respiration, and an urgent dyspnœa. But one can obtain that only through medical and dietetic treatment of the primary disease and frequent control of the lungs. When one finds deformity of the thorax, he must induce its removal as without this kind of early orthopædic treatment, emphysema is scarcely avoidable.

If one is not able to satisfy the indications of the disease, then he does well to treat the symptoms which are those most generally found in emphysema, viz.: the catarrh and cough.

First in view are the inhalations of alkalies (bicarbonate of soda and common salt), by means of an apparatus with double rubber qulbs. Inhalations of salt or of turpentine (ol. terebinthinæ) are followed by good success if practised in large inhaling saloons, pine forests, elevations, or on the sea shore; also alkaline and saline muriatic mineral water. The use of expectorants (infs. ipecac, liq. ammon. anis) from time to time, is peculiarly favorable to other cases. Cold spirituous bathing and rubbing of the neck, breast and back are praiseworthy, partly to promote the expectoration through reflex irritation, partly to fortify against new colds. Clean, temperate air, free from dust and smoke; protection from raw, dry winds; the maintenance of a regular warmth of the chest by wearing flannels, assist the removal of the catarrh. The irritating cough, when it exists without copious secretions, is removed by inspiration of steam, by inhalation of the infs. hyosciami, belladonnæ, stramonii; less surely by smoking saltpeter papers. At other times it is displaced by internal remedies, such as narcotics, aqua lauro-cerasi, morphia, essence of belladonna, etc. The over-pressure of the expiration, and the ever threatening disposition to emphysema, are lessened through the mitigation of the cough, by damp, mild, not decidedly fluctuating temperature, exceptional climate, especially in winter time, accompanied by a strong, digestible diet. If whooping-cough is the principal trouble, the best prophylactic against secondary emphysema, espe-

cially for tender children, is a changeable climate, and, indeed, not too pleasant, but somewhat damp and exhilarating.

An effectual therapy against the alveolar ectasia, or, in fact, against the emphysema, can only be possible when the same is formed. If the atrophy of the lung tissue has not yet commenced in any considerable degree, but the entire process is limited to loss of elasticity, then, and only then, can we hope to bring it to direct retraction, the emphysema having been not long in existence. The only rational way in which this end can be attained at present, is the pneumatic treatment which was founded by Hauke, perfected by Waldenburgh, Schmitzler, Lange, von Liebig, Biedert, and others. These gentlemen, in this department, have done no small service to therapeutics.

The function surface of the lungs is lessened by the accompanying dilatation. This continued and repeated dilatation must by and by injure the elasticity of the parenchyma, and later cause it to atrophy or disturb the nourishment. Here occurs the difficulty that one can, through absolute extension of the muscles of respiration, bring the lungs to retract completely, and, by enlarging the space for residual air, accomplish a complete ventilation.

As the air and secretions stagnate in the bronchioles, they again increase the ectasia. In children, in general, the vital capacity of the lungs is not great, also the expiration and thorax contraction are insufficient. Therefore they appear sunken and in need of treatment, which should be on the plan of Wintereich (compare Vol. I, p. 132, this work). The pneumatometer of Waldenburgh* shows little value when the children are old enough to make regular inspirations. In the normal state, the pneumatic pressure power is relatively high, perhaps for the greater movability and the greater elasticity of the thorax. On this account, according to Waldenburgh, it has less value than in grown persons.

The increased but not satisfied desire for air leads to dysnœa and after some time associates itself as a sequela. Sometimes occurs another deformity of the thorax, contracting thorax; further all the above named sequelæ on account of the practical sinking

* Original manufacturers Pölz & Flor, Berlin Unter den Linden, No. 14.

in or the partial bulging out. The pneumatic treatment accomplishes a direct improvement of all the appearances mentioned, now by rarefaction, now by compression of the air breathed. It applies to:

I. Compressed air to remove the insufficiency of inspiration, which is accomplished through an increase of the negative inspirations, pressure as well as the drawing in of a greater quantity of air.

II. Rarefied air sets aside the insufficiency of exspiration and increases the pressure of exspiration, so that a greater quantity of air is exhaled.

Both of the acts of breathing are assisted by regular changing and exact regulation of the pressure. These ends pneumatic cabinets on the one side, and pneumatic transportable apparatus on the other, have attempted to accomplish, but with very different success. The pneumatic cabinets, such as are found at Reichenhall, Nice, Ems, etc., are, indeed, baths in compressed air, into which the negative inspiratory air arises; and thereby more air is conducted into the lungs. Dilatation, of course, is favored as the patient experiences the wearisome expiration. To lighten this and raise the positive expiration pressure, this must be made into relatively thinner or absolutely thinned air. This innovation, at least through exhalation into atmospheric air, has already been introduced. This works in a doubtful manner, as Waldenburg has shown, on account of the great difference of pressure which is not capable of being regulated. Instead of this intensive and rapid dimunition of pressure one can on this account recommend only a gradual ascending pressure to promote the reaction of the lungs to which Kirauthe rightly gives the preference. Especially is this the case in the tender constitutions of children. These one should have exactly fixed in a pneumatic cabinet, and only then in behalf of the restitution of alveolar ectasia allow breathing. But in this sitting should be noticed not only the inhalation of compressed air, but also the grade of the rarefication of the atmosphere in which the expiration takes place. In other cases one should aim at the widening of the lungs with deep satisfying inspirations. The cure of chronic lung emphysema, however, is difficult. The pneumatic cabinets, if they

are not made correctly and do not attain technical completeness, the exact regulation of the expiration pressure, resemble the transportable apparatus.

The transportable apparatus answered formerly in the high grade, because they made more promptly and more surely the exact regulation of the in- and ex-piration. Failure may be caused by the escape of a part of the air through the apparatus. The improved apparatus of Waldenburg[1], Schnitzler's modification of the same[2], Weil[3], and Biedert[4] are at present the only ones which can be thought of in reference to practicable usefulness, transportability and for rarefaction and compression of the atmosphere. All mention of anything similar to these are found in Knauthe's writings, or in Waldenburg and Biedert's works. In this work only so many are mentioned as are able to maintain a reliable, constant, thickness of the air for every phase of the respiration, and thus enable one exactly to decide in an individual case, when in a fitting manner to increase the disturbance of breathing. How far the alveolar ectasia of children extends to the grown is not a fixed fact. There is not yet a sufficient collection of data. According to Knauthe, the expiration into thinned air offers what fails in emphysema, since it is the "specific mechanical antidote" of Waldenburg, the proper remedy of Biedert. One in the future can only aim at the making of this important therapeutical aid available, not only with large intelligent, but also with little children. This is to be done through the greatest technical completeness possible.

Hanke, the meritorious originator of Pneumo-Therapy, calls attention to the fact, that the elasticity of a child's thorax furnishes a favorable condition, the narrowness of a child's air-passages an urgent indication. The cure of the difficulty by the self-regulating apparatus, brought to notice by him, has not been verified. The remedies discovered by Hanke have accomplished just as little at this stage of the experience. These are the pneumatic coat of mail (Wiener Med. Presse, 1874, No. 34 und

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[1]Berlin, Windler, Dorotheen Str. 3.
[2]Vienna, of J. W. Hauck, Wieden, Kettenbrücke Gasse 20.
[3]Berlin, of Menter, Friedrich Str. 99.
[4]G. H. Jochem in Worms on the Rhein.

36) and the pneumatic tube[1] (Stricker's Jahrb. d. Med., Wien. 1877, I. vol., also Knauthe, l. c.) They are worthy of frequent trial, however, especially with small children.

These arrangements are very ingeniously contrived, the principal thing being without further assistance from the child to suitably regulate the pressure of air both without and within the lungs. They cover the body as well as the chest with a coat of iron. Within this, one can, at will, rarefy and compress the air so that in the one case the intra-pulmonic, in the other the extra-thoracic pressure predominates. One must acknowledge that such an arrangement, in case it proves practicable, may be made useful for little children, as the sittings cannot be rendered difficult by restlessness. It is only to be regretted that till now a regular alteration of the in- and ex-piration is not possible. One is, therefore, compelled for the present to continue both acts in rarefied atmosphere, then again draw a number of breaths of compressed air. Though in both cases disadvantages present themselves, they have some attainable uses. Strengthening of the ectasia, difficult expiration, dyspnœa, apnœa, disturbance of the circulation can occur in tender, young children, as Hauke himself has granted. The consolation subjoined by him, "that the child attains the satisfied feeling of a complete respiration only when it breathes constantly a succession of ascending respirations to the full dilatation of his lungs," has only limited power for good in some cases. These are atelectasia, laryngo- and broncho-stenosis through croup and rachitic thorax. So long as one cannot make the above mentioned indications satisfactory for the in- and ex-piration, such an apparatus does not work with success. It can only assist in lightening the inspiration, dyspnœa, and promoting the filling up of the lungs with oxygenated air. The above described transportable apparatus is used with good success with large children if the mouth pieces and masks fit exactly.

The cautions are:—

I. The sittings are not to be continued too long, nor to occur too often.

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[1] Manufactured by Richard Mauch, Vienna, III., Apostel Gasse 14.

II. The difference in pressure dare be only gradually and cautiously increased and diminished.

III. The rarefied air is a powerful stimulant for the lungs. On this account are the acute inflammatory processes to be excluded from the pneumatic treatment.

The last point also forms a weighty indication against the pneumatic treatment in the related cases.

The curative action of the rational and thoroughly carried out pneumatic treatment is self-evident and lasting.

The inhalation of compressed air distends airless lungs and sunken thorax, increases the vital capacity and quiets the hunger for air. On this account, a richer supply of oxygen is made possible, a more thorough cleaning out of the carbonic acid gas, and a more decided exchange of gases. On the contrary, the exhalations into rarefied atmosphere cause quite an observable diminution of the lung volume, for the duration, even with stronger dilatation. The elasticity of the lungs and thorax can be compensated; even the beginning disturbance of nutrition, for instance by capillary compression. The expectorations are lessened, and those severe symptoms of asthma and bronchitis stopped by the easing of the expirations. The exchange of gases in the expiration into rarefied atmosphere is more complete as the ventilation of the lungs becomes better, and the pent-up residual air is thrown out. Here are cited as further favorable results in pneumatic therapeutics and beginning emphysema: Improvement of the tissue change; the anæmia; the deformity of the thorax; freedom of circulation; cure of the accompanying catarrh, and lessening of the disposition to the same.

Pneumatic therapy has many successes to show for those special afflictions or complications which belong to emphysema. These complications are partly improved or cured as soon as the primary disease gives way. They are, asphyxia; atelectasia, congenita et acquisita; thorax rachitis; insufflation; dyspnœa in croup (Hauke); bronchitis; asthma (Biermer); ectasia after whooping-cough, and bronchial catarrh (Lange, Waldenburgh von Liebig).

Here must yet be observed that Waldenburgh recommends in emphysema without bronchitis the asthma preponderating, the expiration into rarefied atmosphere; when bronchitis accom-

panies, inspirations of compressed air; in asthma the last during the attack, in the free intervals the usual in- and ex-pirations. Further, according to Langer, warm baths and cold douches assist very much the pneumatic treatment. The method of compression recommended by Gerhardt is suitable for many cases in which one can not arrange for a pneumatic apparatus. This satisfies the indications by mechanically narrowing the thoracic cavity, during the expiration, by enlarging the vital capacity and lightening the expectoration. One must carry out this compression of the elastic chest walls of children with caution and with careful consideration of cares and complications. Geyer recommends as a more constant substitute an elastic shirt. It is self-evident that this only increases the difficulty of inspiration.

The climatic treatment can only be directed against the complications and original affections. According to Biermann one shall, when he has bronchial catarrh, with dry, strong, cough and tenacious secretions, give the preference to low-lying, damp places for the time when the heat ranges 12 to 16 centigrade, especially so if there are sea coasts. It is not to be denied that the rarefied air of high elevations improves the ventilation of the lungs, lessens the insufficiency of the expiration and increases the contractility of the lung tissue. But the disadvantage of a high health resort for children more than for grown persons, lies in the permanence of the rarefaction of the surrounding air. In some cases severe consequences are sure to follow from the greater expansion of the gases of the blood oftener. The more tiresome and less deep the inspirations, which do not satisfy the hunger for oxygen, the more throwing out of water from the lungs, and the increase of the heart's action.

However tempting on first thought to advise a climatic cure for a child which has recovered from some severe disease, yet the correct choice of one which acts directly on the case is difficult.

It is understood from the first that one must in the treatment of emphysema combat the sequelæ as well as the constitutional troubles. These sequelæ are anæmia, intestinal troubles, chronic bronchial catarrh, asthma, and engorgement.

The therapeutics of emphysema of the cellular tissue, when interlobular, mediastinal or subpleural can not be discussed as it

is not clinically diagnosticable. As symptomatic treatment of subcutaneous emphysema are recommended, compress bandages, dry cupping and punctures with the triocar.

BIBLIOGRAPHY.

Biedert, Ph. The Pneumatic Method and the Transportable Pneumatic Apparatus. Volkmmann's Klin Vortäge, No. 104, 1876.

Biermann, A. Climatic Health Resorts and Their Indications. Leipzig, 1872.

Hanke, J. An Apparatus for Artificial Respiration, etc. Vienna, 1870.

Knauthe, Th. Hand Book of Pneumatic Therapeutics. Leipzig, 1876.

Rilliet & Barthez. Treatment, Clinical and Practical of the Diseases of Children. Second edition. Paris, 1853. I.

Vievenot. Contributions to the Pneumatic Respiration Theory. Vienna, 1868.

Waldenburgh. The Local Treatment of the Diseases of the Respiratory Organs. Second edition. Berlin, 1872.

Ders. The Pneumatic Treatment of the Diseases of Respiration and Circulation, etc. Berlin, 1875.

PREGNANCY OF 56 YEARS.

Mr. Lapprey, making the autopsy of a woman 84 years of age, detected in the uterus a consistant tumor which was covered by a stony layer. The woman had noticed the tumor first when she was 28 years of age, and it had never made her any other trouble than by its weight and volume. The physicians being present at the autopsy were astonished to find in the interior of the cyst a well-developed fœtus, from six to seven months old. By putting the fœtus accidentally in some strong solution it was destroyed. (The author does not say if the fœtus cried lustily after being 56 years in the uterus.—Tr.)—*Lyon Médical.*

Selections.

ACUTE TONSILLITIS—EFFICACY OF THE COMPOUND GUAIAC GARGLE AND OF THE SALICYLATE OF SODIUM.

For therapeutic purposes, according to the teaching of Prof. J. Solis-Cohen, and as practiced in his clinics, cases of acute tonsillitis may be divided into two classes: 1st, simple inflammatory or local; 2d, rheumatic or constitutional.

Each of these classes might be extensively subdivided, according to the most prominent objective or subjective, anatomical or pathological manifestations. Such refinement in nomenclature (for this alone is it, practically) is, however, unnecessary in arriving at the therapeutic indications. For whether the tonsillitis be unilateral or bilateral, or the two glands be affected consecutively—whether the inflammation be superficial or deep-seated, circumscribed or diffuse, limited to the follicles, or involving all the component structures—whether the morbid process be confined to the tonsil, or extend more or less widely among neighboring tissues—any particular case having been properly assigned to one of the two groups mentioned, its treatment need not be materially changed.

Of course, should suppuration threaten or occur, or should the enlargement of the tonsils be such that respiration becomes seriously impeded, incision, scarification, or other appropriate surgical procedure may be required. But when the patient is seen early, say within the first twenty-four hours, such accidents are very unlikely; if, indeed, the tendency to grave manifestations be not entirely averted. At all events, they did not arise in any of the cases treated at the Polyclinic.

The treatment has been as simple as it has been eminently successful; the principal reliance having been placed upon two remedial measures only, each of which seems entitled to be termed specifically appropriate for the particular group of cases in which it has been employed.

1. *Simple Inflammatory Tonsillitis.*—When the principal objective symptoms consist in alteration of voice, and more or less redness and enlargement of one tonsil, with or without swelling of the glands at the angle of the jaw; there being little constitutional disturbance; the pain complained of being chiefly due to tension; the odynphagia which is usually present having manifested itself after the swelling of the gland has been noticed; the disease may be considered as a local affection.

The treatment adopted in such instances is a modification of the old and well-tried guaiac treatment; and consists in the employment as a gargle of a mixture long known throughout the West and Southwest under the name of "diphtheria mixture" and similar titles. This is known to the House Pharmacopœia as the *Gargarysma Guaiaci Composita.* Two fluidrachms each, of the ammoniated tincture of guaiac and the compound tincture of cinchona, are mixed with six fluidrachms of clarified honey, and shaken together until the sides of the containing vessel are well greased. A solution, consisting of eighty grains of chlorate of potassium, in sufficient water to make four fluid-ounces, is then gradually added, the shaking being continued. If the apothecary is careful to make this preparation *secundum artem*, a not unpleasant mixture will be obtained. Without due care, however, the resin will be precipitated.

The patient is directed to gargle with this mixture freely and frequently, at intervals varying from every half-hour to every three hours. In some instances, a saline cathartic is first administered. Should any of the guaiac mixture be allowed, it is considered rather beneficial than otherwise, and its deglutition is sometimes recommended.

Relief is usually experienced within a few hours, and recovery is prompt. Patients often return only to report their cure.

A young colored man had been attacked about eight hours before presenting himself at the clinic. When the writer saw

him, there was great enlargement of the left tonsil, causing intense pain, and preventing deglutition of solids. The submaxillary gland and some of the cervical glands of the same side were so much swollen that he was compelled to bend his head down toward the right shoulder. This patient reported himself well sixteen hours after coming under treatment. In his case, one ounce of Rochelle salts was first administered, and the compound guaiac gargle was directed to be used every two hours; but the relief following the first application was so grateful, that, in order to secure freedom from pain, the patient resorted to his medicine every half-hour or so.

A little girl of seven years was brought to the clinic with unilateral folliculous tonsillitis, a few hours after she had begun to complain of pain in her throat, and was told to use the compound guaiac gargle at intervals of two hours. She did not return until a month later, June 16, when she was brought for treatment of an acute coryza. Her mother remarked: "That medicine for her throat worked like a charm. She got worse for a few hours, but was well next morning."

Several similar cases of prompt relief could be cited in addition.

2. *Rheumatic or Constitutional Tonsillitis.*—When the first manifestation of the disease (excluding prodromata of headache, malaise, etc., which may or may not be present) is intense pain upon deglutition, causing great accumulation of saliva from unwillingness to swallow the excessive secretion; examination of fauces revealing perhaps a slight congestion—perhaps nothing more; more or less febrile reaction soon ensuing; the case may be assigned to the second or rheumatic group.

In these cases the odynphagia cannot be explained by anything visible upon inspection. It is sometimes referred to a point representing the entrance into the œsophagus, and the examination with the laryngoscopic mirror will show some redness of the mucous membrane covering the arytenoid and supra-arytenoid cartilages and the pharyngeal surface of the cricoid cartilages. More or less soreness in the throat is constantly present; respiration often becoming painful, and phonation excessively so.

Some hours after, as the headache, pulse, and temperature decline, one or both tonsils become enlarged; usually one con-

secutively to the other. The follicles are often distended with a caseous or sebaceous material, which, under the microscope, is seen to consist of scattered (pavement) epithelial cells, some oil globules, and a mass of granular detritus, mingled with which are the spores and filaments of the *Leptothrix buccalis*, *Oïdium albicans*,* rod-bacilli, and other fungi, as usually found in the secretions both of healthy and of diseased tonsils. Some drops of blood from an inflamed tonsil, in one of these cases, showed great deformity of the red corpuscles, and unusual size and number of the white corpuscles, which were more than ordinarily granular; but no micrococci could be detected therein. A drop of blood from the finger of the same patient presented nothing abnormal.

Usually, as the pain in the throat subsides, muscular soreness occurs in the neck, back, and loins, oftentimes in the sterno-cleido-mastoideus of the side corresponding with the tonsil first enlarging. Sometimes the soreness is experienced in one or more of the limbs; and some one of the larger joints may become more or less stiff, though neither red, swollen, nor painful Indeed, rheumatic or rheumatoid pains may flit from one portion of the body to another, during several days. In rare instances, transient albuminuria follows.

These cases are treated with salicylic acid or salicylate of sodium. The constipation usually present, due either to the disease or to the remedy, is relieved with an appropriate saline cathartic.

The following formula makes a pleasant and efficient mixture:

℞.—Sodii salicylatis.....ʒij.
Ol. gaultheriæ.....m j (vel. q. s.).
Liquoris ammonii citratis,
Syrupi simplicis.....*aa* f ʒii.—M.
S.—A tablespoonful every two hours.

As soon as the pains are relieved, the intervals are lengthened; or sacillyate of quinine or of cinchonidine is substituted, as a

*Or something which I cannot distinguish from it. I have seen this fungus in but one case, and, curiously enough, in this instance there were no aphthæ upon the mucous membrane covering the hard palate; though I have observed aphthous sores in several of these cases, and especially in the neighborhood of the incisor teeth.

tonic, in five-grain doses, at intervals of four to six hours. Ringing in the ears (an occasional occurrence) calls for cessation of the sacillyates; when it usually passes away. In one case, where persistent, it was relieved by small doses of the infusion of digitalis. During the progress of the more acute symptoms, the patient's comfort may be promoted by allowing small lumps of ice to melt in the mouth from time to time, or even by the use of the compound guaiac gargle.

Stiff-neck, the most annoying of the muscular complications, should it be severe, is relieved by faradization more promptly than by medication; the negative electrode being applied to the painful spot, or moved along the course of the sterno-cleido-mastoid muscle, the positive electrode being grasped in the hand of the same side. The same measure is, of course, applicable to other muscles.—*F. Solis Cohen. Medical News.*

Dr. Koch's Official Report on the Cholera in Egypt, with the Results of his Investigations and Discoveries, as Chief of the German Scientific Expedition.*

As the cholera epidemic was already rapidly on the decline when the Commission arrived in Egypt, it was not to be expected from the very commencement that that country would afford full scope for the investigation. Moreover, as in an epidemic the period of its decline is the least adapted for its ætiological investigation, the original plan was to make the necessary preparatory studies in Egypt, in order, on the epidemic spreading to Syria, to avail ourselves of these in those places, which from having just been invaded by cholora, would have afforded a favorable ground for investigation.

The first part of this plan we have been able so far to carry out according to the wishes of all, for the Commission has found plenty of opportunity, during its stay in Alexandria, of collecting the necessary materials for its preparatory studies. For this success I am chiefly indebted to the kindness of the doctors of

* Translated by the *Standard* correspondent from the *Imperial German Gazette.*

the Greek Hospital, who advanced the objects of the expedition in the most effective manner, by placing at our disposal sufficient rooms, as well as the cholera patients who came to the Hospital, and the corpses of those who died from the disease.

At first the Commission occupied for their work two bright rooms adjacent to one another on the ground floor of the hospital. One of them was devoted to the microscopic work, and the other to the inoculation experiments. The animals on which the experiments were made were kept in both rooms. But as their number increased, and as it appeared dangerous to be handling the inoculation-matter in the same rooms in which one spent almost the whole day, the animals for experiments were brought into a room of the old Hospital, distant from the others, where tne experiments of inoculation were made.

The materials we have had up till now for investigation have been twelve cholera patients and twelve cholera corpses. The symptoms corresponded in each case in every detail to those of genuine Asiatic cholera. Small portions of the blood of these patients, of their ejecta and excreta, were taken and examined. As it was very soon evident that the blood was quite free from micro-organisms, and that the ejecta too contained only comparatively few of them, but that the excreta contained a very significant amount of micro-organisms, these were mostly used for the inoculation experiments on the animals. Amongst the dissected subjects the most different nations are represented (three Nubians, two German-Austrians, four Greeks, one Turk), various ages (two children, two adults over sixty years of age, the rest between twenty and thirty-five), and cases of different durations of illness. The most important point, however, is that the bodies could generally be dissected immediately after death, or only a few hours afterwards. The changes which are caused in the organs, and especially early in the intestines, by decomposition, and which render the microscopic investigation of these organs extremely difficult, were thus with certainty avoided. I am inclined to give the more weight to this circumstance, as it will scarcely be possible to obtain in other places subjects so suitable for microscopic investigation. The state of the bodies, as also the symptoms of the disease, left no doubt that we had to dea

here with Asiatic cholera, and not—as was asserted at first on many sides—with diseases similar to cholera, so-called choleriform and choleroid complaints. No organized infectious matter could be traced in the blood, or in those organs which in other infectious diseases are generally the seat of micro-parasites—as, for instance in the lungs, the spleen, the kidneys, or the liver. Sometimes bacteria were found in the lungs, which, however, as was evident from their shape and position, had nothing to do with the course of the disease, but had reached the lungs by the inhaling of the ejected contents of the stomach. Micro-organisms in great abundance and of most different kinds were found in the contents of the intestines, and in the excreta of the cholera patients. No one kind was present in great predominance over the others. Special signs were also wanting which could have been attributed to a connection with the process of the disease. On the other hand, the intestines themselves gave an important result. With the exception of one case, which some weeks after getting over the cholera terminated fatally from another complaint, a certain kind of bacteria was found in the coatings of the intestines. These bacteria are stabiform, and belong, therefore, to the bacilli they resemble in size and form the bacilli found in glanders. In those cases in which the intestines by magnifying show the slightest changes the bacilli had penetrated into the utricular glands of the mucous membranes of the intestines, and had caused there a considerable irritation, as the dilation of the opening of the gland, and the collection of granular circular cells in the interior of the gland, showed. In many cases the bacilli had found their way between the epithelia of the gland, and had multiplied between the epithelia and the glandular membrane. The bacilli had also settled in large numbers on the surface of the villi of the intestines, and had often penetrated into their tissue. In severe cases, which terminated in bloody infiltration of the mucous membrane of the intestines, the bacilli were found in very large numbers, and they did not then confine themselves to the invasion of the utricular glands, but passed into the surrounding tissue, into the lower layers of the mucous membrane, and in some places right to the musular skin of the intestine. The intestinal villi were also in such cases penetrated by bacilli.

The chief seat of these changes is in the lower part of the small intestine. If this discovery had not been made in perfectly fresh corpses, one could have made little or no use of it, for the influence of putrefaction is able to bring about similar vegetation of bacteria in the intestines. For this reason I had been unable to attach any value to the fact that I had already, a year ago, found in a cholera-infected intestine, which I had received direct from India, the same bacilli in the same order as now in the Egyptian cholera cases, for I was always obliged to think of a possibility of complication with post-mortem putrefaction. But now this former discovery, which was made in four different Indian cholera subjects, is of considerably greater value, as now the possible error caused by the appearance of putrefaction can be safely set aside. It is also not unimportant that in the similarity between the state of the intestines in the Indian and Egyptian cholera cases a further proof of the identity of both diseases is obtained. The number of cholera subjects that we were able to investigate was certainly small. But as we met with the baciili in all cases of cholera that were immediately brought under our attention, whilst in the one case that we investigated after the process of cholera was over, and in many other cases of people who died of other diseases, and whom we examined with the same purpose, they were missing, there can be no doubt that they stand in some relation to the operation of cholera. However, from the coincidence of the latter with the finding of bacilli in the mucous membrane of the intestines, we cannot conclude that the bacilli are the causes of cholera. It might be the very reverse, and it could just as well be supposed that the operation of cholera causes such disturbances in the mucous membrane of the intestines, that from the many bacteria that are always parasitic in the intestines, one form of certain bacilli was enabled to penetrate into the tissue of the mucous membrane of the intestine. Which of these assumptions is the correct one—whether the operation of infection, or whether the invasion of bacteria is the primary cause—that can only be decided by trying to isolate the bacteria from the affected tissues, to propagate them artificially, and then by inoculation experiments on animals to reproduce the illness. For this purpose it

is absolutely necessary to have such animals at one's disposal as are susceptible to the infectious matter in question. Despite all endeavors, no one has yet indisputably succeeded in making animals ill of cholera.

Several experiments have been made on rabbits, guinea-pigs, dogs, cats, monkeys, pigs, rats, etc., but always without result. The sole statements which in this matter are deserving of attention have been made by Thiersch, who saw a number of mice get diarrhœa, and die after having been fed upon the contents of a cholera-infected intestine. This experiment has been confirmed by trustworthy experimentalists, as for instance Burdon Sanderson, though certainly disputed by others. Anyhow, it was necessary to repeat these experiments, as it is of the greatest importance to find an animal that is susceptible to cholera. For this purpose, fifty mice were brought from Berlin, as it was very improbable that the requisite number of them could be soon procured in Alexandria, and the inoculation experiments were begun on these. Monkeys, too, which are the only species of animal susceptible to some human diseases, such as small-pox, were also used for these experiments. Finally, attempts were made to infect some dogs and poultry. But in spite of all efforts these experiments were without result.

The bacilli found in the contents of the intestines and in the coatings of the intestines were also artificially propagated, and with these, too, experiments were made by giving them as food and partly by vaccination. Some of these produced putrefying illnesses when they were inoculated, but cholera could not be produced from any of them.

That the infectious matter must often be contained in a powerful form in the excreta of cholera patients is proved by much experience, especially by the frequent cases of illness amongst laundresses, who had to wash the linen of the cholera patients. In the Greek Hospital such a case occurred, and a laundress, who was exclusively occupied with the washing of linen from cholera patients, caught cholera.

It is perfectly certain that in the numerous samples made use of, some, at least, contained the infectious matter. If, however, no result was obtained, it may have been because the species of

animals used for the experiments were themselves unsusceptible to cholera, or that the correct method of inoculating has not yet been discovered. In both directions the experiments are to be continued and modified, but there is little hope of anything being attained in this direction with the materials at our disposal, for it is not very probable that the reason of the failure of these experiments is to be looked for in these circumstances alone. There is another explanation, for the accuracy of which much can be said. In one of the places visited by the cholera it is known the plague died out long before all the people had taken infection, and although the infectious matter was scattered in great quantities all over the whole place, fewer people became ill, and the epidemic disappeared in the midst of many persons susceptible to the disease. The occurrence can only be explained by the supposition that towards the end of the epidemic the infectious matter loses some of its infective power, or at least is uncertain in its spreading. But if towards the end of the epidemic even human beings are themselves no longer so liable to receive the infectious matter, then one cannot but expect that this also will be the case in experiments with animals, about whose susceptibility to cholera nothing is as yet known. For our experiments we only had at our disposal such objects as had been collected at the end of the epidemic, whose inefficiency was more or less to be pre-supposed. It is possible that under favorable circumstances—for example, at the commencement of the epidemic—the inoculation of animals might succeed, and by this means we might at once get to know if the bacilli traced by me in the mucous membrane of the intestines are the real cause of cholera.

Far as the results hitherto obtained by the Commission are from the solution of the problem, and little as they are adapted for practical use in struggling against cholera, yet, in consideration of the unfavorable circumstances and the short time of investigation, they may be considered good. They entirely answer the original purpose of the preliminary investigation, and in so far exceed this as enough has been effected for the first condition, which has to be fulfilled in inquiring into a contagious disease, by the constant discovery of characteristic micro-organisms, and thereby a fixed boundary has been placed for further investigations.

From the preceding account it can be seen that the Commission has not been able to acquire fresher information for the solution of the problems given to it, than has been obtained hitherto.

Hereupon follows a brief explanation of the localities where the investigations could be continued, concluding thus :

"The only possibility of continuing the investigations is now offered in India, where in several large towns, especially in Bombay, the cholera is prevailing to such an extent that one cannot expect it to die out for some time. There, too, we could without any doubt most easily get attached to a hospital, that having proved of so great advantage in Alexandria."

Acting on the above report, the continuation of the scientific investigations in East India has been allowed, and the Commission will shortly leave for Bombay for this purpose.—*Medical Press.*

MUNICIPAL HYGIENE. THE GROWTH OF CITIES AND THEIR IMPORTANCE IN MODERN CIVILIZATION. DEATH RATE IN CITIES—COMPARISONS. THE SIGNIFICANCE OF DEATH RATES. By DR. JOHN S. BILLINGS, Surgeon U. S. A. (Abstract of lectures delivered in Hopkins Hall, Johns Hopkins University.)

1.

Dr. Billings began by defining sanitary science as a system of calculations and statements based upon probabilities, and not upon rigorously demonstrated laws. But probabilities govern a large part of the actions of men. This is an age of cities, and the tendency of the times is to congregation, association and division of labor. Statistics were adduced to show that in this country and England the urban population has been increasing at a rate far beyond the rural. The statistics of one hundred cities in the United States show an increase for ten years ending 1880 of 366 per cent., the total population of the country during the same period only increasing 30 per cent. "Speaking roundly, it may be said that in 1790, one-thirtieth of the population was found in cities of more than 8,000 population ; in 1800, one twenty-fifth ; in 1810 and 1820, one-twentieth ; in

1830, one-sixteenth; in 1840, one-twelfth; in 1850, one-eighth; in 1860, one-sixth; in 1870, more than one-fifth, and in 1880 half way between one-fifth and one-quarter." (*Tenth Census, Statistics of the Population, etc., Washington*, 1881. *Page* 30.) If 4,000 people constitute a city, more than one-fourth of the population are urban. The sanitation of cities is therefore the sanitary problem of the day. The lecturer considered the various motives which should incite to effort in this direction. If other motives were lacking, he maintained that it should be done as a matter of self-protection, on the common business principle that it will pay. The annual number of deaths in Baltimore is now nearly 9,000, having been for the last two years over $2\frac{1}{2}$ per cent. of the population. If we can prevent only one-tenth of this—that is reduce the rate to $2\frac{1}{4}$ per cent., or 20.5 per thousand, which certainly can be done, we shall save nine hundred lives, and get rid of one thousand eight hundred sick who are constant burden and expense. The money value of this is over a million dollars. The recent experience with small-pox cost the city treasury over $90,000, to say nothing of the cost of the deaths, and of the sickness to individuals, or the loss to the business of the city, due to the prevalence of the disease. Yet this epidemic might have been prevented at comparatively small expense. Dr. B. quoted from Ruskin and Sumner to illustrate the two different standpoints from which the question of sanitation is regarded, and said there was no real contradistinction between these apparently opposite views so far as public hygiene is concerned, so long as we are careful not to consider the latter as a matter of charity and philanthropy instead of as what it is—a matter of right and justice and of self-preservation, intended to do away with those evils which are due not so much to the struggle for existence as to the imperfections of civil institutions, and which fall chiefly on certain classes, a distinction which is very properly insisted on by Professor Sumner.

The lecturer next spoke of the improvements made of recent years in municipal sanitation, a result which had its origin about forty years ago in Great Britain, and which was largely due to vital statistics, as tabulated and expounded by Dr. Farr. The figures representing the mortality of a place are not alone the

best test of its sanitary condition, but upon the whole a very good test, and often the only available one. The practical importance of accurate and complete vital statistics is not duly estimated in this country. Even health officers often give little attention to them, and are unacquainted with the proper method of using them. The most fruitful cause of error in calculating mortality rates is connected with the mode of estimating the average living population which has furnished the deaths for a particular period. In a rapidly growing city, with a fluctuating population, it is very difficult by any method to make reliable estimates as to the number of living population for any other year than that in which a complete census is taken. To illustrate some of the methods employed and their different results, the lecturer referred to the case of Baltimore. The population of this city, according to the United States census of 1880 was 332,313.

UNITED STATES CENSUS, 1870.

Total population	267,354
Number of families	49,929
Persons to a family	5.35
Number of dwellings	40,350
Persons to a dwelling	6.63

UNITED STATES CENSUS, 1880.

Total population	332,313
Number of families	65,356
Persons to a family	5.08
Number of dwellings	50,883
Persons to a dwelling	6.54

The method ordinarily used by statisticians is to suppose that the population has increased since 1880 in the same proportion as between 1870 and 1880: thus estimated, the population of the city, June 1, 1881, would have been 339,620; June 1, 1882, 347,087; June 1, 1883, 354,720. These figures are believed by the Health Officer of Baltimore and by the gentleman charged with the registration of its vital statistics to be too small, and they prefer to take as the basis of their calculation the number of voters, as ascertained by the police census, and to assume that

each voter represents five persons of the population. In this way the population is calculated at the middle of 1882, as 408.520. The city health authorities refuse to accept the census of 1880, and estimate the population at that time to have been 393,796, or over 61,000 more than the census, a deficiency in the latter, according to them, of over 15 per cent. Their estimate is based upon the following considerations:

"There are 80,000 registered legal voters in Baltimore; five inhabitants to a legal voter is a fair and reasonable allowance, which would make the population 400,000. The census taken by the police for our School Board, of children between the ages of six and twenty-one years, gave 86,961. This would be a fair estimate of one-fifth of our population, making the same 434,805. * * * Again, there are 90,000 houses in Baltimore. Deduct 10,000 for manufacturing establishments, warehouses, stores, and unoccupied dwellings, estimating five inhabitants to each house (a very low estimate) our population would be 400,000." (A. R. Carter, letter in San Engineer, Feb. 15, 1881, p. 130). The lecturer said: "A failure to enumerate 15 per cent., or more than one out of every seven inhabitants could only result from criminal negligence on the part of the enumerators, a negligence directly opposed to their pecuniary interests." General Walker says of the census of Baltimore that it was taken by a thoroughly capable and experienced officer, who had had experience in the same field in 1870; that he knew of nothing impeaching the completeness and integrity of this officer's work; that the danger of omission in a city like Baltimore, with comparatively few persons in a dwelling or tenement house was at a minimum; that the children between six and twenty-one years of age constitute probably between one-third and two-fifths rather than one-fifth, a proportion only found in Paris, "where the science of preventing infant life is very thoroughly understood and extensively practiced;" that if the ratios of New York, Brooklyn or Albany, were applied to the school population of Baltimore as determined by the police census, the inhabitants would be less than 290,000; even according to the ratio of Boston, where the proportion of school children to pop-

ulation is less than in any other American city, the population would still be less than 316,000.

Dr. B. then pointed out that the police census shows a diminution rather than an increase of the voters. Also that the number five is much too large a ratio; the ratio should be calculated, rom census data, not assumed. In Boston, where the estimate is made in the same way (owing to a recent extension of the city limits), four is taken as the ratio, which is evidently much more nearly correct. The true ratio for Baltimore is about 4.25. The estimate as to the number of houses is much too great, and the lecturer saw no reason to doubt the accuracy of the census figures. Their correctness is confirmed by the police census of houses taken in December, 1883, which gave the following results: Number of dwellings, 54,546; of places of business, 6,885; of churches, 267; total, 61,698. This corresponded with data which the lecturer had obtained from the Water Department, according to which, on January 1, 1883, there were 51,284 houses supplied with water and 6,000 unsupplied. "From these data I think we may conclude that there are not over 54,500 inhabited dwellings at present within the city limits, and if we allow to each 6.50 persons, which is the ratio shown by the last census, we should obtain 356,430 as the present number of inhabitants. If we take the last police census and, making a little allowance for those at that time absent from the city, take the number of voters at 82,000, and take the ratio at 4.03, which is larger than that derived from the census data, we find that the number of inhabitants is 352,600. Taking all these data together, the probability becomes very great that the living population within the city limits on January 1, 1883, was between 350,000 and 356,000 persons." "The mode of computing population by the number of occupied houses is one which gives fairly accurate results, provided the number of such houses is accurately ascertained, but it will not do to merely estimate them."

None of our cities possess accurate birth statistics, except possibly a few in Massachusetts; the deaths are, however, in most cities, fully and fairly reported.

The lecturer then proceeded to show the influence of cities on

the health of their inhabitants, and showed that the mortality is greater in large cities than in small, and greater in the latter than in rural districts. The lecturer next showed a diagram giving the death rate in Baltimore for each of the last thirty-three years. The average for the ten years preceding 1860 was higher than since, but it now seems to be slowly increasing. The diagram gives the impression of large waves of variation, with a period of from ten to fifteen years, and the surfaces of these large waves are irregular from the smaller variations for the single years. These great weves may possibly be connected with changes in the sun, shown by the sun-spots.—*Maryland Med. Journal.*

Treatment of Warts With Magnesia.

Lucas-Championnière reports in the *Journal de Méd. et de chir. prat.*, August, 1883, a case of a young child, aged 8 years, cured of a great number of warts on both hands by the treatment of Foussagrives. This treatment consists in giving each day 80 centigr. of calcined magnesia internally. The cure was complete in two months, and due to the action of the magnesia. The author remembers the anatomical analogies existing between warts and epitholiomas, and thinks that the magnesia may give equally good results in the latter. It will be interesting to make this research.—(*La France Médicale.*)

Rumination Among the Insane.

Dr. Bouchard read a paper at the Society of Medical Sciences of Lille, on the rumination, which known as a pathological rarity, is in reality very frequent, especially in insane asylums. There are fourteen ruminating patients in the asylum of Lommelet; eleven among 100 idiots, and three among 576 patients. Many of these patients ruminate before presenting any symptoms of insanity; therefore this symptom might have a grave diagnostic significance.—*Journal des Sciences Méd. de Lille.*

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ARTICLE I.

REPORT OF TWO CASES OF ABDOMINAL ABSCESS. By W. H. FITCH, M.D., Rockford, Ill.

Had I considered either of these cases simply perinephritic abscess, I should hardly have deemed them worthy of record, but they differed so essentially from cases of that kind that I have seen, that I have thought them of enough interest for brief detail.

CASE I.—Miss C., aged 21, consulted me first in October, 1877, for pityriasis capitis, tinea tarsi and eczema of external ear. She had scarlatina when six years old; this eruptive fever was followed by the above troubles and other constitutional dyscrasia, from which so many suffer for years and even a lifetime. Having prescribed the usual remedies at irregular intervals for some time with unsatisfactory results, in March, 1878, I made a some-

what more careful inquiry into the history of her case, and learned that in 1870 she was treated for ague for some time unsuccessfully by usual remedies, and obtained cessation of chills and fever by Indian cholagogue. This sickness was followed by extreme anæmia, which she ascribed to taking Fowler's Solution. However, she slowly regained her color, but suffered so much from a stinging pain in left side, headache, backache, and other neuralgic pains, that she was able to pursue her studies only at irregular intervals. The winter of 1873-74 she passed in California, and in the fall of 1875 went to Avon Springs for some months, but obtained no relief. While there she was taken with pain in the back, and fell on the floor; was carried to her room and was unable to walk or stand for a few days. Had several similar attacks after returning home, and was temporarily paraplegic. During the summer of 1877 she was severely ill with spinal spasmodic pains and neuralgia of sciatic nerve, and treated with blisters, hypodermic injections, liniments, etc., and after some weeks was again able to leave the house. She first consulted me concerning her back and side in March, 1878. Her appetite was capricious, sleep poor, menstruation painful, mind depressed, unable to take physical exercise except of gentlest kind.

A prominent homœopathic gynæcologist of Chicago had examined her pelvic organs on two days preceding her visit to me, and pronounced them healthy. Not wishing to prescribe on another's diagnosis, I made an examination, and found extensive erosion of the os uteri, endo-cervicitis, and anteflexion. The left hand on the abdomen detected a large tumefaction in the left abdominal region, extending from the crest of the ileum upward nearly to the ribs, and forward to within an inch and a half of the median line, that was somewhat tender to pressure, oval, circumscribed, non-fluctuating, and could not be reached per vaginam, thus excluding pelvic deposit or cellulitis.

This was quite a surprise to her, as she had been examined and treated by several physicians, and it had not been discovered—but was a solution, in part at least, of her years of suffering and despondency.

She was requested to paint the part with tr. iodine, and take alteratives and tonics, while the endo-cervicitis was treated with

iodized phenol, borated tampons, etc., for a few weeks, with gradual improvement. In the beginning I had told her the swelling was uncommon, and would give her trouble. Not apparently satisfied with my prognosis or experience, unbeknown to me, she consulted another specialist in Chicago, who assured her it was quite common, and would disappear with the uterine trouble. Thus encouraged, she became his patient for three months, until the cervical catarrh was cured, but she was no better, and was recommended to the seaside for salt water baths, change of air, etc., also to be in charge of another specialist, where she remained until February, 1879, when she returned to me unimproved. An examination revealed very deep and somewhat indistinct fluctuation of the tumor. She was again put upon tonics, and flaxseed poultices applied until September, when aspiration was performed, and about one pint of pus withdrawn. By Dec. 19 the cavity had refilled, when I introduced the trocar a little above and halfway between the crest of the ileum and the median line, and withdrew 14 ounces of healthy pus, and washed the cavity out with a 5 per cent. sol. of carbolic acid. Jan. 21, 1880, the cavity had again partially refilled, and two ounces of pus were withdrawn, and again washed out with an 8 per cent. mixture of carbolic acid. April 16, slight deep fluctuation could again be detected, and six ounces of pus were withdrawn, and the cavity cleansed. After this there was no reaccumulation. It was necessary to introduce the trocar about two inches before the pyogenic capsule was reached, which was very tough, and penetrated with considerable difficulty.

The aspirations were not followed by any considerable pain or constitutional disturbance, and she was able to leave her bed and go down stairs on the same day. From the time of last aspiration her health and strength rapidly improved; the pain and lameness left the side, back, limbs, and head, and she has now enjoyed nearly four years of the best health of her life since a child.

Case II.—April 12, 1882, was called to see Miss T., age 18, in full flesh, and every external appearance of perfect health. She gave me the following history: In April, 1880, while at college in the East, was suddenly seized one day with pain in the back, like lumbago, so she was scarcely able to move. Painted

her back with iodine and applied various plasters, which relieved somewhat. In June the pain had shifted to the right side and was somewhat milder. In September she had pain in the back and both sides, being severer sometimes in one place then in another. During the fall and winter of 1881 she again had pain in back and sides, especially when sweeping, stooping or lifting. Had also considerable headache, especially behind the ears, increasing nervous irritability and chilly sensations, but no regular chills. In spring of 1881, pain in sides and back become constant and severe, and at times would run down right thigh and leg. Sleeping on right side increased the pain. In July, 1881, first consulted a physician, who used dry cups, liniments and blisters, but did not benefit. During the fall of 1881 she was conscious of growing weaker, having more constant pain and being less able to elevate right limb, go up or down stairs, get in or out of carriage, walk, dance, etc. A horse-back ride caused some pain, and on dismounting she was unable to step. Pain was somewhat in front of abdomen, and ran down to ankle. Could not sit long in one position. Appetite varying, sometimes loathing all kinds of food, at others craving sour articles. Was too nervous to sleep. In December went out of town for a month, as she was somewhat easier, and danced a little, which didn't cause much pain. Was pale at times, with dark rings under the eyes. At other times had flushed cheeks, and evidence of fever. Right leg and foot often felt cold and numb. Could not rest weight of body on right limb. Began to walk somewhat lame, and the right hip seemed higher than the other.

While away at this time, she slipped and fell on the pavement, which caused the return of so much pain that she was unable to stir for several days. After returning home from this month's absence, the right limb could not be moved except as she lifted it with her hands. Could not cough, laugh, or sneeze without increasing her pain. In February, 1882 the right leg seemed an inch longer than the other, and the whole side, arm and hand, were painful. Could not turn over in bed without sitting up. Had recently become fretful and emotional. Felt best, half reclining with hand pressing the side. Menstruation began at 14; always somewhat irregular, but painless, until the present trouble began

two years ago. Her last physician said the "womb was tipped," but made no examination; the one before the last treated her for hysteria. Present condition: Pulse, 120; temperature, 101°. Patient well nourished and abundance of adipose tissue. Right half of abdomen most prominent, measuring an inch and half more than left. Also right thigh an inch larger than left, from œdema, which extends nearly to ankle. With the patient lying on her back a large deep fluctuating tumor was found in right side of abdomen, extending from near the liver to the crest of the ileum and a little below and more than half way to median line, sensitive to pressure. From my experience with Case 1, I at once made diagnosis of abdominal abscess, and advised aspiration. As this was the first time I had been called to the family, the parents wished a little delay unless the case was urgent. The patient was put on quinine, and mineral acids and poultices applied to side. May 1, Dr. J. saw the young lady in consultation, but could not make out fluctuation, which was much obscured by a thick layer of adipose, and thought the case one of solid tumor of ovary. In this I could not concur. He, however, agreed to exploratory aspiration, which was done on May 3, the patient being under ether. The trocar was introduced three inches and three-quarters before the abscess cavity was penetrated, when sixteen ounces of laudable pus were withdrawn. It was introduced about one inch above crest of ileum and two inches toward median line.

The cavity was washed out with six per cent sol. carbolic acid. Operation not followed by reaction. May 29, cavity partially refilled and eight ounces aspirated; cavity washed out. July 10, fluctuation again detected, and six ounces of pus evacuated. Then about six ounces of an eight per cent sol. carbolic were injected through the canula into the cavity or some other place, as I was unable by any manipulation of my instruments to withdraw it, I withdrew the canula and reintroduced it with a trocar, but could not get back my solution, which represented about half an ounce of the pure acid. There was nothing to do but await results, which we did with utmost anxiety. When she recovered from the ether she complained of pain in region of abscess and a mixture of morphine and atropia was administered hypodermically, and repeated in the evening, when, as no other unto-

ward symptom appeared, we felt the danger of poisoning was past. A mild grade of peritonitis followed, which was easily controlled, and on the 16th the tympanitis had subsided, the pulse and temperature were normal. From this date recovery was rapid, swelling of right side and limb disappeared, together with tilting of pelvis, lameness, fever, and pain. The cavity has not since refilled and the young lady is in perfect health. In my last communication with Case I, she said she had felt her trouble as a stinging pain for ten years; while Case II undoubtedly had its origin more than two years before I saw it. Neither one exhibited any tendency to pointing or spontaneous opening. Neither had urinary disturbances. If my carbolic acid sol. was only five per cent, there was still nearly 2½ drams, but it was ordered eight per cent. Why it did not kill I am unable to answer. I have not space to give the differential diagnosis between these two cases and perinephritic abscess, only that the *tout ensemble* was unlike it.

ARTICLE II.

CLINICAL AND PATHOLOGICAL REPORTS OF CASES OF INSANITY.

By S. V. CLEVENGER, M.D., Special Pathologist Cook County Insane Asylum.

Female case No. 294. Mania in puerpero. Mary C.; age 32; Canadian; married; admitted July 26, 1883. Two weeks before, placenta prævia and difficult forceps delivery. Four days afterwards, became suddenly insane, and during a remission of furor was brought here helpless, incoherent, restless. Talked of electricity all about her; had a succession of furibund attacks; tried to walk up the wall; tore clothing; sang loudly, but seemed to recognize persons and be conscious of surroundings. Under Dr. Spray's constant care the attacks gradually lessened in severity, and the intervals grew longer between them. At times when disappointed at not seeing her husband, would become very much depressed and furor would follow, whereupon he was advised to visit her oftener. By the last of August patient was fully recovered, and was taken home September 9, 1883.

Female case No. 223. Melancholia. Ulrica H., aged 18, German, domestic, single; admitted March 8, 1883. Would do but little else than pray continuously. Badly nourished. A maternal half sister became insane at age of 16. Mother died of variola. Father living and well. June 20 a severe, uncontrollable dysentery began, and a few hours before her death, June 26, her mind was restored, and she talked rationally, expressed a fear of death, but soon became reconciled to its approach.

Autopsy next day. Endocolitis. Body emaciated. No osseous dural adhesions. Entire brain abnormally pale. Cerebromeningeal adhesion over center of middle temporal convolution right side. Meningeal vessels full. Cerebral vessels more apparent, owing to paleness of brain. No asymmetry. An arachnoid cyst, size of a walnut at center of cerebellar base, containing clear fluid. As in melancholia there are rarely to be found brain lesions of any kind, it would be well to attach but little importance to this cyst in any ætiological sense. However, it is *possible* there may have been a connection between it and the reduction it may have undergone through the colliquative discharges preceding her restoration of reason. The etiolation of the brain would, however, point to a depressed quantitative or qualitative blood condition as more to be regarded in her case.

Female case No. 849. Typhomania. Adelaide G., aged 24, German seamstress, single, admitted Sept. 27, 1883. Two months previously, arrived in Chicago from interior of State; alleged that an expressman had outraged her next day, since when she had wandered about the streets distractedly. Two front teeth missing, sordes abundant, mouth parched, general emaciation. Erythematous patches on legs, which, if nodosum, must have been in recovering stage, as the surface was even. Struggles against all attention, raves and presents other evidences of acute delirious mania; constantly repeats "Ich bin Gott's Kind." Medicine administered with difficulty. Insomnolence extreme. Nov. 15, less delirious, but still furibund. Nov. 30, fever subsided but refuses to speak much, acts sillily, is quiet, and industriously crochets all day. December, stands by window gazing out vacantly, sometimes weeps. January, answers in monosyllables, laughs childishly if addressed. February, the expression

of fatuity common in terminal dementia more apparent. Is more inclined to idleness and apathy.

Female case, No. 310. Monomania. Ellen Z., aged 26. Stockholm, clerk, single, was "queer" since seven years old. Past four weeks before admission, imagined herself a Princess of Sweden. Admitted August 16, 1883. Is very quiet and dignified. Can be trusted out of ward. She has a fair education, and by exercising patience her story was extracted from her disjointedly, and with digressions and ramblings among non-essentials, by which she sets great store. She suddenly came to the conclusion that she was a Swedish princess, because in Stockholm the members of the family she was raised with were unlike her in tastes, aspirations, etc., and certain persons had been very kind to her in America, a condescension she construed into a recognition of superiority. Things she read in newspapers and various insignificant matters appeared to her mind confirmation of her dominant idea. This is an exaggerated phase of the suspiciousness Shakespeare decribes as causing jealousy to see justification in trifles. Both the sane and the insane, when ridden by an idea, see everything in unusual ways. The patient wrote long letters to the superintendent, offering him $40,000 for her release, stating that as she intended to spend $25,000 for a musical education suitable to her royal position, time was a consideration to her. With these grandiose, systematized, reasoned-out delusions, she had the delusions of persecution natural to the disorder from the opposition she met with everywhere. She grew gradually less obtrusive with her delusions, and by October confessed to me that there might be nothing in them; a little later asked seriously if she really were crazy, and had been imagining all these matters; Nov. 19, 1883, she was discharged, having yielded up all her false notions and apparently fully recovered.

The fact of her peculiarities being noticeable when quite young, and augmenting suddenly as she matured, would show how imbecility and monomania may be graded into one another. Spitzka regards them as allied. Had these delusions appeared earlier she might have been classed as a hebephreniac, though with decidedly monomaniacal tendencies.

Female case No. 70. Terminal dementia. Apaline H., aged 37, German, married; admitted June 16, 1877. Insane eight years before admission. Entered on old books as maniacal. Had been a hard working woman, with a worthless husband and eight children. It is said her insanity dates from burning of her property. She has passed to the demented stage of filthiness, incoherence, and unconcern for everything but eating. Both a son and daughter are also in the asylum. With the proof of heredity in their cases, their ages would indicate the mother's predisposition to insanity dated to her juvenility, and renders it probable that she inherited the taint.

Female case No. 305 (daughter of preceding female case, No. 70). Hebephrenia. Nellie H., aged 20, American, single; admitted August 9, 1883. Insanity has been approaching gradually "for years." Depressed, with occasional silliness and explosions of anger. Is in fair health; careful to dress neatly; converses fairly well. She seemed to realize her condition, and on arrival begged not to be taken to the same ward where her mother was. She asked anxiously daily if we did not consider her as better and appearing much improved. She was sent home August 26, but her friends returned her in a nearly demented state November 24 following. Deterioration is gradual, but sure. Her face is growing "soggy," expressionless, and she often stands in one place for hours unconcerned in her surroundings.

Male case No. 311 (son of preceding female case, No. 70). Hebephrenia. Edward H., aged 25, American, single; admitted October 25, 1883. His insanity has gradually approached during past years. Three weeks before admission began to chase peddlers; became noisy and more silly than formerly. Imagines himself a big Indian. The following is from his pen, and a fair sample of insane literature:

"Cook Co Insane Asylum Cook Co Ills "Dear ——: I am still in the insane Asylum getting along well and if You have anything to send me Please bring it Yourself or send it by mail Yours ever lovingly my mother is getting better I hope ten Years is a long time for a lady to be out of her mind. I ask Your mother for Your hand She as You may remember concented my

fortune is small but my love is big, and my hate is still bigger so remember if You have anything to send to me Geog w washington Stone Dead or alive. You can do as you wish I lost my cent my Post office money orders have been taking from me and Whatever wase done with them I dont know. They may have locked them up taken away from me and Youred for some other purpose You can speak to your mother or write and ask Your Father to Please and help you if he can and then some time tell him I asck You for your hand as my WIFE and in case of war I must leave You at home, unless you are willing to follow me, but I would rather leave you at home with your mother in such times so I will be more ably to attend to my bussiness better when I am alone thats the reason Dear —— when I tend to bussiness I allwase go alone and let me know if Fred —— and your mother hase asck your pardon for what they done to you and me He Insulted me and You in my absent tell your Father how you fell agaist me for protecktion My Mother and my Fathers left wills for me but I never see them, or, they were never shone to me after me visiting Chicago three different times so I think it would be nessesery to have my Parents attend to this matter of bussiness, for me, or if they whant me to attend to it for them I can do so but would rather my *Father* would attend to it for me Chief Apach and several other tripes have been wronged and they or rather I came to them I smoked the pipe with them and the pipe said War, my tripe are the Commanches they said pease. when I smoke pipe it meant pipe, and when we whant Peasee wee make our own pease or our own warr) Ingland whants war let them make there own warr my Country lives in pease unles they force use and thats what they have done. so let them learn to make pease with Americka. My mother named me when first born Washington

Yours truly Edward"

"P. S. Notice this letter well and save it for me to read again when I return home or return to Chicago as I have no home, only among my tripe of Indians the Comanch."

The systematized delusion does not make him a monomaniac, as some would suppose, for he does not attempt to reason about it.

Female case No. 136. Recurrent Insanity. Ellen D., aged 36, Irish, married, admitted June 4, 1881. In 1879, two months

before her fifth baby was born, the house in which she lived burned down, and she was exhausted in the endeavor to save property. Rallied a little till the baby was five months old, when headaches and wakings at night, imagining house on fire, began. On the streets, soon after, was seized with blindness and vertigo, followed by overpowering desire to return to Ireland. Sold off household goods without husband's knowledge and became indifferent to children; was in asylum five months and discharged apparently recovered. Headaches continued with frightful dreams, increasing with pregnancy. Six weeks before last confinement, came to Chicago from St. Louis, became depressed, and fearing to be sick without shelter went to the County Hospital, thence to poorhouse, where child was born the day following. Mania in puerpero began, and she was brought here. Husband said to be a drunkard and abusive to her. During long intervals she would be perfectly rational, industrious, and quiet. She is naturally well behaved and gentle, but two or three times yearly she would become morose and furibund, swear and use obscene language, for a week or more, and then recovering become very penitential, apologizing to all, saying she remembered everything but was powerless to prevent her bad behavior.

Last attack was in February, 1883; in July some of the usual prodromata appeared, which she noticed as preceding her trouble, such as pain in side and back, with tongue furred and bowels costive. Slight purgation caused all these to disappear. Apparently recovering.

Female case No. 137. Terminal Dementia. Mary H., aged 26, Irish, single, domestic, admitted June 9, 1881. Facial erysipelas, relatives state, "lasted two years preceding her insanity," which began with furor and verbigeration, and at this writing has progressed to the chattering incoherency of dementia, without its abject helplessness. She works in the asylum dining-room quite willingly, and is much better off while so engaged. She is very abusive and talkative, mocking everyone, but not destructive. Appears to be chronically angry, but is satisfied with incessant scolding. No hereditary taint. She occasionally makes demonstrations with butcher knives, and under bad management would do harm, but a piece of cake or bread, or the least kindness ten-

dered her, quickly changes the current of her thoughts and intentions.

Female case No. 50. Imbecility. Keziah S., age 44, American, single, admitted Feb. 24, 1876. Reads and writes a little. Dangerous if unrestrained; uncontrollable temper when at home; thinks everyone steals from her; incoherent, abusive, and at times very noisy; dislikes men; loves to annoy everyone; microcephalic; never known to be sick. Mother died of some stomach trouble; father of apoplexy, at age of 80. Mother just previous to patient's birth attended grandfather in last illness, and was overworked. Menstruates regularly. Rachitic in infancy. She is so suspicious that others will steal from her that she insists upon washing all her own clothing; will not trust it in laundry. If anyone touches anything belonging to her she keeps up an incessant chatter, half shriek and half gabble.

Female case No. 3. Terminal Dementia. Catherine L. age 32, American, single, admitted Jan. 1, 1866, but was in insane department of poor-house in 1857. She is called "Katy Darling," possibly from having sung that song years before demented stage reached. Was originally destructive with frequent furor maniacorum. Has a sister here also insane, (case No. 92). Mother died with pneumonia, aged 50. Father had bad reputation; deserted his family and gave mother much trouble during pregnancy, which is claimed by others in family as predisposing cause of insanity. Exciting cause, disappointment in love affair. "Katy" works faithfully in ward dining room, seems happy, but is incoherent, and has an expressionless face. Assumes much importance, and insists upon patients keeping order in her domain, in which she is very helpful.

Female case No. 92. Terminal dementia. Mary F., age 35, American; married; admitted May 23, 1879, (sister to case No. 3); was always nervous and inclined to melancholia. Insanity first noticed in 1872; husband left home and business and she worried accordingly; Nov. 1877, miscarried, after which developed melancholia agitata, which passed rapidly to terminal dementia. At first she afforded the sentimental idea of insanity, crouched upon the floor with her beautiful black hair drawn across her face, passing her fingers listlessly through the meshes, but while her condi-

tion is more nearly that of her sister's, taking some interest in her surroundings, her bloated visage and fleshiness, recently acquired, reveal the hopelessness of her final stage.

Female case No. 38. Mania. Unknown name; age 59; nothing can be ascertained concerning her; she persists in calling herself Mrs. Lincoln; says she killed "old Abe," her husband; lies inordinately about everything; is obscene, and upon slight provocation furious; fights and swears readily. When asked what her name was before she was married, says it was Todd, thus being consistent in her delusion.

Female case No. 40. Hypomania. Ingar R., aged 46; Norwegian; married. Is quite useful in her ward, helps with the sewing and cleaning, but constantly mutters her orders to everyone. She imagines herself a queen; is not certain as to what kind of a queen she is; readily assents if told she is Queen of Sweden, Queen Victoria or Queen of Tragedy. Her ideas of regal authority are mixed with that pertaining to a police magistrate; she fines anyone five dollars for smoking in her presence; frowns severely upon all, but smiles complacently if petted and flattered. She is not a monomaniac, because her ideas are unsystematized, and no attempt at reasoning is made; nor is she a simple maniac, because with the exaltation of feelings she has no furor at any time. She dresses on state occasions with tinsel crown, and any gaudy trumpery she can find. She has hallucinations of hearing and sight, but of a pleasurable kind.

Female case No. 14. Mania. Wilhelmina S., aged 57, German; admitted January 6, 1871. Chronically verbigerative, abusive, noisy, vile talker. Has hallucinations of sight and hearing. Dislikes and attacks everyone except Dr. Spray, whom she imagines is her son. She has covered the walls of her room with rude drawings and appropriately silly inscriptions. Her day's work consists in standing at the window swearing at passers-by, bobbing her head to and fro with rage. It is amusing to see how her manners change as soon as her "son" appears.

Female case No. 127. Katatonia. Ellen P., aged 23, American, single; admitted in 1880. One of the most interesting cases in the asylum. Cataleptoidal and stuporous usually three months at a time, during which saliva oozes from her mouth, and

she maintains for hours any position in which she may be placed, however awkward. Arms may be elevated, and they will remain as placed. Has the waxy mobility of this disorder marked. Suddenly emerges from stupor, becomes lively and tidy, and invades rooms of other patients, turns repeated somersaults up and down the corridor. Melancholia follows this stage, and lasts about three months. Catalepsy lasts longer in winter than in summer months. Never has menstruated, to attendant's knowledge. Since childhood she has been peculiar in looks and manner, and at age of 14 was more insane, and taken to Batavia asylum and thence home, but her troublesome pranks compelled her being brought here. Last cataleptoidal state began in December, 1883, lasting till January 31, 1884, when she arose in the morning, made her bed, and was quite lively and garrulous, but relapsed later in day. Next day the same thing occurred, but stupor not so marked. February 3, 1884, maniacal stage fully developed, and continues.

Male case No. 5. Mania. Dietrich S.; admitted July 14, 1869. Present age 59; German. First attack sixteen years duration. Spends nearly his entire waking time hammering on the head of a nail. He says every time he hits it he strikes the devil on the head.

Has two fistulous openings in left leg, fibular side below knee, made by bullet wounds at battle of Vicksburg, while a soldier in the late war. He keeps the wounds irritated by pieces of lint inserted in them, as while discharging his health and mind are better. Mania developed after the battle, but "was crazy a little before the war."

Father died of "kidney disease," aged 54; mother of phthisis pulmonalis, aged 57.

Male case No. 60. Monomania. Samuel N., admitted January 30, 1879; aged 54, English, lithographer, spiritualist. Three years insane prior to admission. Says he was arrested for writing an article in the *Religio-Philosophical Journal*, at the request of the editors, who, he claims, are afraid of him. Not intemperate. Talks very rationally. Worked in drug store of

asylum four years; jocularly remarked that he "never got further than pounding cinchona bark." Recently at work in asylum store-room. Is very industrious, and can be trusted anywhere on any errand, but every morning he adorns the trees and public spots around the building with proclamations against spirits, mediums and ghosts. His fulminations are embellished with off-hand geometrical figures, doubtless suggested by his lithographic career, but these figures evidently serve some cabalistic purpose. Here is one of his least offensive documents. It is headed with a sketch of a church: "Little Church Round the Corner. Moral Church we bury our brothers in one peice In honor of the cannons of our order Ladi Lado Lade Ladum Lady These ladies know nothing about Red Stocking In Honor of the Nitric Acid Ceremonies." Which smacks more of freemasonry than another one, wherein he inveighs against certain bastard mediums, and threatens to take away their spiritualistic control. I have a collection of his pronunciamentos.

Male case No. 24. Monomania. Admitted March 18, 1873. James C., age 45, Irish, lawyer, married. Verbigerative. Delusions systematized. This is one of our "show patients." He has a very plausible delivery, and tells you confidentially how a certain judge before whom he plead turned into a boa-constrictor, and the jury into devils. Satan bothers him considerably. July, 1883. He is undergoing more metamorphoses than Ovid dreamed of. He used to wipe one eye with a moist salted rag until the optic was quite inflamed. Now he says he has cast off thirteen skins. Employs his entire time blowing snakes from his nose, and expects soon to be transfigured. Much of his acquired legal adroitness clings to him. For example, a visitor, thinking it best to acquiesce in all an insane person suggested, was asked by him recently if he (the visitor) didn't know that Lincoln was President? Ans. "Yes." "Well, you know General Grant has captured Mexico?" Ans. "Yes." "And you know that Susan B. Anthony is Vice-President?" Ans. "Yes." "Well, you know a great deal more than I do, and I think you are a bigger fool." With this he turned contemptuously away.

ARTICLE III.

TREATMENT OF ECZEMA. A Lecture by HENRY J. REYNOLDS, M.D., Professor of Dermatology, College of Physicians and Surgeons, Chicago. Reported by R. W. Mathers, of San Francisco, Cal., of the Senior Class.

When we consider the scores of names that have been made use of by the different authors to designate the numerous forms of eczema, as a natural consequence we get the idea that the treatment must necessarily be very varied in order to fullfil the numerous requirements resulting from so many different existing conditions.

When we consider, again, that many if not all these numerous forms of the disease are or may be produced, or at least aggravated, by external causes, we necessarily arrive at the conclusion that the treatment, in order to be the most beneficial, must be to a great extent *external* or local in character.

And again, a consideration of the fact that nearly all of these various manifestations of eczema tend to spontaneous recovery when the part is simply protected from external or local irritation, suggests the idea that the external or local treatment must be mainly conducted with a view to the removal and continuous suspension of all forms of external or local irritation.

The treatment then must be mainly external; its chief object being the removal and continuous exclusion of all irritation. In no disease of the human body, however, are careful observation, scientific investigation, good judgment, and common sense more essential in the physician than in the treatment of eczema in its various forms, locations, phases, and stages. It cannot be intelligently managed by rule or by any specific line of treatment; the remedies must be adapted to the particular existing conditions met with in each individual case. What would prove useful in one stage, in one form, in one locality or in one person, may be not only useless in another, but absolutely injurious. The secret of successful management of this disease, perhaps more than all others, lies not so much in the amount of knowledge the physician possesses, as it does in the proper and scientific application of what he does know. The pathology being absolutely

identical in no two cases, so the treatment must necessarily vary; and a knowledge of specified lines of treatment, or certain combinations of drugs said to be useful, with a neglect of consideration of the principles upon which treatment should be based in each individual case, is liable to mislead.

With these few ideas constantly in mind, with the confidence and coöperation of the patient, with the possession of good judgment and common sense, with even a limited amount of scientific knowledge, the physician is prepared to intelligently undertake the management of each case as it presents itself, no matter what its particular form or name may be; and is in the majority of cases, under such circumstances, warranted in guaranteeing a cure.

In a disease which, untreated, naturally tends to chronicity it is of the utmost importance that in rendering a prognosis, the physician secure for himself an abundance of time, in which to complete the cure. The coöperation of the patient with regard, to the length of time he is willing to persist in the carrying out of the prescribed treatment, is as essential to the ultimate success of the same, as the remedies made use of. The physician is many times defeated in a cure in chronic cases solely by lack of persistence in the treatment on the part of the patient.

The hosts of remedies for the external treatment of eczema may be embraced under the heads of oleaginous preparations, dusting powders, and various astringent, alkaline and anodyne lotions.

Perhaps all cases presented for treatment may be intelligently managed by dividing them into three classes: First, those the features of which are mainly of an *acute* character; second, those forms wherein the predominating features are *subacute* in type; and third, that class of cases that take on the indolent or *chronic* form. The treatment may then be arranged accordingly; always subject, however, to constant variations according to conditions warranting the same; for instance, the acute may very soon take on a subacute form; the subacute may approximate in character the acute or the chronic, and the chronic may at any time, owing to circumstances perhaps not under the con-

trol of the physician, develop acute symptoms. Here, as before stated, the physician is called upon for common sense, good judgment, power of discrimination, etc., which are as essential elements in successful treatment as an unlimited knowledge of remedies.

First, then, before adopting any line of treatment, determine what the predominating features are; whether they be acute, subacute or chronic. To a naturally close observer, with even a limited amount of experience, this is a matter of no great difficulty.

Acute.—In this form of the disease, soothing measures usually give the best satisfaction. The effect of water and atmospheric action upon a surface of this kind seems usually to be injurious, and to fulfil the indications in this case, the different oleaginous preparations generally answer the best purpose. To envelop the part in a lotion of equal parts of oleum amygdalæ dulcis and aqua calcis, in certain cases, works admirably. The oleum olivæ or oleum lini may be substituted for the oleum amygdalæ. Various poultices answer as well or better in some instances. They may be made of linseed meal, ground slippery elm bark, etc., and in order to do the most good, should be applied hot or warm, and allowed to remain as long as possible without changing. By covering them with oiled silk, they will retain the heat longer, and thus obviate the necessity of so frequent changing.

Subacute.—In this class of cases, which may assume this form from the beginning, or may follow the acute, the various dusting powders, certain soothing and mildly stimulating ointments, etc., are useful. Lycopodium, carbonate of magnesia, bismuth, oxide of zinc, boracic acid, camphor, alkaline remedies in the form of soap, iodoform and salicylic acid, alone or in various combinations and proportions, or combined with certain mild unguents, as ung. aquæ rosæ, ung. petrolati, etc., will be found among the more useful of this class of remedies. For instance:—

℞ Zinci oxid.....ʒi–ii
Pulv. camph.....ʒss–i
Pulv. lycopodii.....ʒi

Sig.—Apply twice or three times a day, after cleansing with soap and hot water.

℞ Pulv. iodoformi.....grs. x–xx
Zinci oxid.....ʒi
Ung. aq. rosæ vel petrolati.....ʒi
M. Sig.—Apply two or three times a day.

The camphor and oxide of zinc are particularly useful if an antipruritic effect be required. Soap in this stage should be only mildly alkaline, some of the hard or soda soaps being rather the preferable form. It should again be borne in mind that during the treatment of this stage the symptoms may at any time assume either the acute or chronic forms. and necessitate a variation of the treatment accordingly.

Chronic.—In this form, which may be chronic from the commencement, or may follow the preceding form, more active and stimulating measures are required. The soaps which, in this stage, are used for their stimulant and antipruritic effect, dissolving and getting rid of pathological products, which create irritation, induce pruritus, prevent physiological action, etc., should be of the strongly alkaline or potash variety, and should be freely used. The different tarry preparations seem to be among the more beneficial remedies in this stage. The application of clear oxide of zinc, boracic acid, etc., in powder, governed according to the particular condition of each case, answers a good purpose. If there be considerable exudation with a tendency to pus formation, and not much bright redness of the surface or acute symptoms, the application of clear boracic acid in fine powder, after washing with sapo viridis and hot water, twice a day, works admirably, especially so in eczema of the leg with venous varicosity and infiltration, the powder being then secured by application of a snug bandage, rubber, with loose cloths interposed between it and the leg being in most cases preferable. The tarry preparations may be used in the form of lotions or ointments, the latter, however, being preferable if much excoriation or fissures exist, in a manner similar to the following:

℞ Picis liquidae.....ʒi
Saponis viridis.....ʒii
Spts. lavandulæ.....ʒii
Spts. rect. ad.....ʒviii
M. Sig.—Apply with friction three times a day.

℞ Olei cadini.. .....5i
Acid boracici 5i
Ung. aq. rosae vel ung. petrolati.....5i
M. Sig.—Rub gently into the skin three times a day,

The pix liquida or the oleum betullæ albæ may be substituted for the oleum cadini.

It must be remembered that this chronic form may at any time develope acute symptoms, at which time the measures must not be so active; or when first presented for treatment, it may be chronic as regards duration and still the predominating symptoms be acute. Absolute cleanliness should be enjoined in all stages when practicable. In eczema of the scalp where the part is liable to be covered with crusts and scales, they should be first removed by soaking with oily preparations, washing, etc. The treatment may then be adapted to the condition as in other localities. Compression, by means of plasters, is useful in many chronic and subacute cases where the condition, or location, render the application of a bandage inadmissible.

Constitutional.—While it may be conceded that in the majority of cases the treatment must be mainly external in character, it is, nevertheless, essential that the general system be kept in a condition that will necessarily favor the desired reparative process. For this purpose, it is quite probable again, that no specific line of treatment can be laid down that may be suitable in each and every case. It is the custom of many physicians to prescribe arsenic in this disease, but instead of doing good it is, no doubt, absolutely injurious in many cases; this is especially true of the acute forms. Many of these forms seem to be influenced materially by malaria, and in this case the anti-malarial treatment should be adopted. The general condition of the skin, alimentary canal and other organs should be regulated, if necessary. Arsenic may be tried in the dry, or squamous varieties, if other measures fail. In the pustular or other forms, wherein a pyogenic tendency exists, the sulphide of calcium is well worthy of a trial and sometimes works admirably. It may be given in doses of from one-tenth to one grain three times a day.

ARTICLE IV.

A CASE OF RETENTION OF PLACENTA SUCCENTURIATA. By DR. HAUSSMANN, of Berlin.

The following article, written by Dr. Haussmann, lecturer on gynæcology and obstetrics at the University of Berlin, throws a light upon certain conditions in the confinement of women, which to my knowledge have been hitherto entirely ignored in this country. I remember distinctly a case of this kind where the physician had deliverd the child, a placenta, and, as he thought, all of the fœtal membranes.

The woman, who had been anæmic for a number of years, died from hæmorrhage, and the autopsy proved the presence of a placenta in the uterus, with a part of the fœtal membranes. The county physician laid the blame on the doctor for having torn the placenta, thus causing fatal hæmorrhage. The latter being able to prove that he had delivered a whole placenta, denied the statement, and there was confusion on all sides.—*O. Stroinski*, M. D.

The presence of a second placenta in single births in the human female, which has to be regarded as retrogradation in the sense of Darwin, has been known for the last two centuries, and it has been observed either after spontaneous expulsion, or by hæmorrhages or by impregnation after delivery. At the time of the delivery its presence seems to have been detected only in rare cases, notwithstanding the fact that it is found in a certain number of all cases and is very well characterized by the long duration and tardiness of the delivery of the child and of the placenta. The following case, which showed characteristic symptoms at the time of the delivery, proved to me the presence of a second placenta at a time before the first placenta was delivered, and it gave me the indications for the proper action.

Mrs. X. had normal pains at the regular time, and at a quarter to 5 o'clock in the morning a living boy weighing 3,000 grams was born. About ten minutes after the birth of the child I attempted to remove the placenta by friction and pressure through the abdominal walls, the uterus contracting but little and there being considerable hæmorrhage. This attempt failed but by a

second attack ten minutes later, the expression was easily performed. But in elevating the placenta and in the attempt to remove the fœtal membranes which were yet enclosed in the genital organs, I noticed a rupture in those membranes. Entering the vagina, I found a resistant tumor on the fœtal membranes, and in entering the uterus the presence of a second placenta was detected and which was adherent to the uterine walls. It was situated on the posterior wall of the uterus and adjacent to the os internum, and it was intimately connected with this wall and the fœtal membranes. In carefully separating this second placenta from the adherent wall I removed the whole from the now regularly contracting uterus, the latter being washed out with a 2 per cent. solution of carbolic acid. The patient recovered in the normal time, and the lochiæ were of the regular amount. The first placenta was normally formed, except the cotyledons, which were somewhat flat. The second placenta had a tongue-like form, and it was about 9 cm. long on its lower margin; 2 cm. on its upper surface; 5 cm. broad, and its seat on the fœtal membranes was distinctly distinguished from that of the first placenta. The method of removing the placenta by expression through the abdominal walls has now been generally accepted, but I will here call the attention of physicians to the fact that this act is sometimes made impossible by the presence of a placenta succenturiata.

ARTICLE V.

A CASE OF MONSTROSITY. A CHILD WITH A DOG'S HEAD.

By C. HARD, M.D., Ottawa, Illinois.

On the night of September 8, 1883, I was called to the vicinity of Starved Rock, in this county, to attend Mrs. G., a German woman, in her second labor. The waters had been discharged several hours before I arrived. The pains were violent and frequent. On examination, I found the os only partially dilated. A soft mass presented, which at first I supposed to be a breech presentation. The pains continued almost without cessation for hours, when, just at sunrise, she was delivered of a very large female child, weighing 14½ lbs. The body was well-formed and

perfect, but the head was almost the exact counterpart of a bull pup, and was the most hideous monstrosity I ever saw. The eyes were high up on the forehead, large and round, and protuberant, and were two and a half inches apart; no eyebrows. The nose was long and flat, and continued to the mouth, with wide open nostrils; the distance from forehead to nose and mouth $3\frac{1}{2}$ inches. The ears were small and long, standing out from the sides of the head one inch, and looked like the cropped ears of a stable dog; they were $3\frac{1}{2}$ inches apart. Back of the ears was a single tuft of coarse reddish hair, about one inch long. There was no back part to the head; or rather, no bones, but a simple sac containing a soft, semi-fluid mass. Taking the whole face together, the resemblance to a dog was most striking, and was at once remarked upon by all present, some of whom were anxious that I should despatch it at once, but I allayed their fears by assuring them that the child would not live. It did live four hours, giving out faint moans from time to time.

Owing to the sensitiveness of the parents, I was unable to procure the head, even for the purpose of making a cast. The husband, upon questioning the mother, who does not speak English, gave me the following statement: Her father kept a large dog chained to his kennel, and during the early part of her pregnancy, she was in the habit of visiting at his house. While going past the dog one evening he suddenly sprang at her, barking furiously, and frightened her almost out of her senses, and she had labored under the impression ever since that her child would be marked. Such is their story, and I give it for what it is worth. The parents are both well-formed, and have one child two years old, also well-formed and bright, and there were no ties of consanguinity between them. What caused the monstrosity?

Manaca, the root of Francisca uniflora acts energetically on the lymphatic system. It is used largely in Brazil as an antisyphilitic remedy and as a purgative and diuretic. In rheumatism it seems to be a specific and it is said that twenty drops of the fluid extract given twice daily are sufficient to suppress the severest attack. In Brazil it is called *mercurio vegetal.*

Hospital Reports.

ARTICLE VI.

COOK COUNTY HOSPITAL.

The meeting of the recently elected medical board resulted in the assignment of the following gentlemen for duty:

As surgeons, Dr. T. W. Miller; Dr. R. L. Rea; as physicians, Dr. S. A. McWilliams; Dr. P. H. Cronin; gynæcologist and obstetrician, Dr. John Guerin; oculist and aurist, Dr. L. D. Jacobson; pathologist, Dr. W. T. Belfield.

Clinics are given as follows:

Monday, 2 P. M.—Autopsies by Dr. Belfield.

Tuesday, 1:30 P. M.—Medical clinic by Dr. McWilliams.

Tuesday, 2:30 P. M.—Surgical clinic by Dr. Rea.

Friday, 1:30 P. M.—Medical clinic by Dr. Cronin.

Friday, 2:30 P. M.—Surgical clinic by Dr. Miller.

The new pavilions are being fitted for occupancy; it is expected that the western pavilion will be in part occupied by the obstetric ward during February.

It is estimated that each pavilion will accommodate 75 patients.

The upper floors of these buildings are divided into small rooms, available for private patients or cases needing special attention.

The new buildings will contribute a surgical, gynæcological, obstetric and medical ward to the capacity of the hospital—a much needed addition, as the wards now in use are continually overcrowded during the winter.

In finish and arrangement they are much superior to the wards now occupied. The central or official building will not be com-

pleted before the autumn; the estimated cost of the two pavilions and central building will be about $300,000.

The profession will be interested in knowing that the warden is devising an arrangement for tabulating the histories of patients; as formerly kept, the records furnish no scientific data.

E. P. Davis, M.D.

Alcoholic Paralysis and Cerebral Syphilis.

Alcoholic paralysis is more common among women than among men; it is symmetrical and localized to homologous muscular groups of both sides. The lower extremities are more affected than the upper. The extensor muscles are more attacked than the flexors. The paralytic troubles are accompanied by analgesia or symmetrical hyperalgesia, by convulsions, or the sensation of formication, or stitches in the ends of the limbs. There are also vaso-motor troubles, *i. e.*, redness or paleness of the skin, or œdema of the back of the hands or feet. The patients were also affected with other symptoms of chronic alcoholism, *i. e.*, gastric troubles, hallucinations, etc. The faradic current has but little effect on the paralyzed muscles. The patients die mostly from marasmus, coma, or a pulmonary trouble, and in the autopsy there is found an alteration in the nerves and muscles, while the medulla and spinal cord are healthy.

Prolonged Diphtheria.

A young physician performing tracheotomy was infected with diphtheria of the nasal cavities and the throat. For nine days all the symptoms of diphtheria were present, but after that time he furnished for nine months pseudo-membranes which had the exact form of the nasal cavities. In another case of a little boy 2 years old, where tracheotomy had been performed, the pseudo-membranes from the trachea were cast off for 154 days, and in another case the membranes appeared for 43 days per tracheam. —*Jour. des Maladies des femmes.*

Society Reports.

ARTICLE VII.

REPORT OF PROCEEDINGS OF THE ILLINOIS STATE BOARD OF HEALTH. Quarterly meeting, Springfield, January 17–18, 1884.

The regular January quarterly—which is also the annual—meeting of the Illinois State Board of Health, was held in the rooms of the Board in the Capitol building, January 17 and 18, 1884.

Present at the Thursday (January 17) session: R. Ludlam, A. L. Clark, W. A. Haskell, A. W. H. Reen, and the Secretary, John H. Rauch.

On motion of Dr. Haskell, Dr. Ludlam was called to the chair in the absence of the President. Dr. Ludlam called the meeting to order, and presented Mr. Reen, of Peoria, the new appointee, vice Dr. McLean, whose term expired December 31, 1883.

The Secretary moved that the regular order be dispensed with, pending the arrival of the President, from whom a telegram had been received, announcing his delay at Vermont, Fulton county, on account of a disabled engine. The motion being carried, the Board went into executive session, during which, among other matters, the certificates of Drs. G. A. Allen and A. Jones were ordered revoked for unprofessional and dishonorable conduct, and the Secretary was instructed to notify several other parties to desist from practices deemed unprofessional and dishonorable by the Board, on pain of revocation of certificates. Upon charges filed with the Board, the Secretary was instructed to cite a number of others to appear at the next meeting, to show cause why

they should not be debarred practice in Illinois on the ground of unprofessional and dishonorable conduct.

At the conclusion of the executive session, the Board proceeded to the election of officers for the ensuing year, the result being the re-election of the following gentlemen as their own successors:

The Hon. Newton Bateman, LL.D., President; John H. Rauch, M.D., Secretary; A. L. Clark, M.D., Treasurer.

The Chair also appointed Mr. Reen to serve on the auditing committee with Dr. Haskell.

The Treasurer, Dr. Clark, submitted his annual report, showing that, at the date of the last report, there was a balance of $220.91 in his hands; that $684 additional had been received through the Secretary's office during the year, and that $715.85 had been paid out on orders, leaving a balance of $189.06 at the close of the fiscal year, September 30, 1883.

On motion of Dr. Haskell, the report was received, and placed on file.

The auditing committee reported that it had examined and audited accounts, amounting to $2,306.57; had found the same to be correct, and recommended that they be paid.

The report of the committee was accepted, and at 10:45 P. M. the Board adjourned until Friday, January 18.

Friday, January 18, 10 o'clock A. M.—Present: Newton Bateman, W. A. Haskell, W. R. McKenzie, A. W. H. Reen, John H. Rauch. Under the regular order of business, the Secretary presented the following:

QUARTERLY REPORT OF THE SECRETARY.

During the quarter ended Dec. 31, 1883, there have been received in the Secretary's office 930 communications, letters, reports, etc., exclusive of ninety-three diplomas submitted for verification, and the papers accompanying the applications for certificates in 142 cases. There were sent out 1,183 letters, postals, circulars and other communications, and about 8,000 copies of the publications of the Board. Seventy-nine telegrams were received, and 68 sent.

The office correspondence for the year amounts to 4,036 letters and other communications received, and 5,157 sent, exclusive of

562 diplomas submitted for verification, and the papers accompanying the applications for certificates from 787 physicians and midwives.

During the same period, 2,712 copies of Annual Reports and Official Registers, 585 copies of the advance sheets of the section on Medical Education, and 73,287 copies of Preventable Disease Circulars, Quarterly Reports and other printed matter, making an aggregate of 76,584 copies of publications, have been distributed.

CERTIFICATES AND LICENSES.

Certificates entitling to practice medicine under the Medical Practice Act, were issued to 86 graduates upon diplomas from legally chartered medical institutions in good standing, and 9 to practitioners on length of practice in the State; making in all 553 practitioners of medicine admitted to practice in Illinois during the year 1883. During the same period, 163 applications have been refused, and 11 certificates have been revoked; thus directly reducing the number of practitioners by 174, through the enforcement of the provisions of the Medical Practice Act.

Among the causes for refusal to issue certificates were the following: Presenting diplomas of institutions not recognized by the Board as in good standing; unsatisfactory personal or professional antecedents, habits or associations, warranting the charge of unprofessional and dishonorable conduct; intent to practice in an unprofessional and dishonorable manner, as by claiming to cure incurable maladies; to possess unusual skill, experience or facilities; and similar claims involving deceit and fraud upon the public. The revocations of certificates were in all cases based upon charges of unprofessional and dishonorable conduct.

Seven certificates were issued to midwives upon the credentials of recognized schools of midwifery, and four upon examination by the Board. A total of 51 midwives have thus been admitted to practice during the year—25 upon credentials, 7 upon length of practice in the State, and 19 upon examination. In all 40 presented themselves for examination, of whom 21 were rejected.

SPECIAL MEETINGS.

The Board has held five special meetings during the quarter, namely, on Nov. 3 and 10, and on Dec. 1, 8 and 15. These meetings were of a purely executive nature, held for the purpose of taking action on sundry cases under the Medical Practice Act. At the meeting held on Saturday, Nov. 3, the certificate of Dr. Frank B. Smith, temporarily of Peoria, was revoked for unprofessional and dishonorable conduct.

Among the other business transacted, the cases of 11 practitioners, holding the certificates of the Board, and against whom various charges had been preferred, were satisfactorily adjusted, the offenders agreeing to refrain from the objectionable practices in the future. In a number of other cases, the parties have left the State, and the disposition of the charges against them should receive attention at the present meeting, as well also as the cases of some others cited to appear.

MEDICAL COLLEGES.

The distribution of the advance sheets of the section on Medical Education and the Regulation of the Practice of Medicine, has resulted in developing a wider interest in the subject than was anticipated. Requests for copies have been received from every part of the United States and Canada, from England, East India and Australia. The section has been carefully revised and corrected, and, in accordance with the authorization of the Board, it is now being reprinted for sale by Mr. W. T. Keener, medical book publisher, of Chicago. The supply at the disposal of the Board is entirely inadequate to meet the demand.

Many questions have arisen during the quarter, concerning the new schedule of requirements of the Board in the matter of medical education. Most of these have been of such a nature as to admit of direct reply, but a number of others have been deferred for the consideration of the Board.

SUITS AND OTHER PROCEEDINGS UNDER THE MEDICAL PRACTICE ACT.

Among the cases brought to the attention of the Board, through the Secretary's office, during the quarter, have been the following:

Robertson.—An "Indian doctor," F. O. Robertson, was arrested on the 26th of December, in Princeton, Bureau county, where he had appeared dnring the county fair in September, 1883, announcing his unusual skill and ability "to the accompaniment of evening concerts, rifle-shooting, stale jokes, etc., and claiming that his medicines are purely vegetable, free from morphine, quinine and all *other mineral* poisons." Five separate charges were made against him, and on the 28th of December, he pleaded guilty before the county court; fines were assessed against him on two charges, on payment of which, and costs, he was released under a promise to leave the locality.

Subsequent to his Princeton performances he turned up in Mascoutah, St. Clair county, where he managed to secure the aid of some of the German press in his behalf, and published his circulars and handbills in that language.

Bogart.—One T. D. Bogart, of Quaker Hill, Ind., was arrested in the early part of November, in Decatur, Macon county, as an advertising itinerant, making a specialty of the treatment of "chronic nasal catarrh and scrofulous sore eyes." He obtained a continuance of his case until December 7, and subsequently sent a petition to the Governor, purporting to be signed by many citizens of Hoopeston under his treatment for "chronic nasal catarrh, catarrhal fever, and scrofula in their many forms." The petitioners pray that the Governor "will grant him a permit by which he can treat cases as above set forth." The petition was referred to the Secretary, who replied to the petitioners that the Governor had no legal right to grant such a permit, and explained that the reason why Bogart was debarred from practice in Illinois was because of his failure to comply with the law.

Bunce.—A man, calling himself "Dr." A. W. Bunce, and claiming the benefit of the ten-year exemption clause, is also under arrest in Decatur, his claim that he practised ten years prior to July 1, 1877, being contradicted. It is asserted that he was digging wells for a livelihood about that time. It is proposed to give him an opportunity to prove his ten years' practice, or to demonstrate his fitness to practice medicine by undergoing an examination.

Dunn.—The advertisiug itinerant, E. C. Dunn, of Rockford, is complained of from Paxton, Ford county; Arcola, Douglas county; and Danville, Vermilion county. Like the preceding case, Bunce of Decatur, he is operating under the exemption clause. The question suggests itself whether such practice as he is engaged in is that contemplated by the statute, as entitling one to exemption from the necessity of making a prima facie show of fitness for the cure of the sick.

Flowers.—The notorious character, "H. D. Flowers, of Fulton City, Whiteside county," continues his rounds. Within a short time of each other complaints were received from his victims as far south and east as Ford county, and north and west as Jo Davies's.

Chicago Quacks.—In Chicago suits have been brought, mainly during the month of December, against Drs. G. J. Williams (also a "lawyer"), Lucas R. Williams (alias Dr. Lucas"), A. W. Boye, Wm. Clarke (son of F. D. Clarke, "no pay until better"), John Bate (alias "A. G. Olin"), John Kean ("no-cure-no-pay"), and a "Dr. Shroder" (a woman).

THE PUBLIC HEALTH.

Scarlet fever has continued during the quarter in many localities, but without in any case assuming a serious epidemic form, while the death-rate from it remained unusually low. The German edition of the Board's circular on scarlet fever, alluded to in the last quarterly report as in preparation, has been published and distributed to many points. Diphtheria has also been reported from several places.

Small-pox has appeared at Stone Fort, Saline county; Farina, Fayette county; McLeansboro, Hamilton county; and Alton, Madison county. The disease was also reported, October 31, from Paris, Edgar county; but the case was subsequently ascertained to be chicken-pox. At Stone Fort the disease was introduced by a woman who had been attending the St. Louis fair, took sick a few days after her return, and died on the thirteenth day of an attack of unmodified, confluent small-pox. Of seven other members of her family, four contracted the disease, the remaining three escaping through successful vaccination after ex-

posure. A relative's family, living in the adjoining township in Pope county, also contracted the disease, and in turn infected the attending physician. Except this latter and one woman, none of those attacked had ever been successfully vaccinated prior to exposure. The physician and woman above referred to had both been vaccinated in childhood, and escaped with mild attacks of varioloid. Of the remaining cases, seven in number, all died of unmodified confluent or hæmorrhagic small-pox. The situation became so serious, and so much apprehension existed in the community and neighborhood about the middle of November, that the Secretary was compelled to visit the locality in person, which he did November 20-24. Reporters, Drs. W. R. Osborne and D. Bozart, Stone Fort, attending physicians.—The case near Farina was also due to contagion contracted in St. Louis, an unvaccinated young woman, who finally recovered after a severe attack of hæmorrhagic small-pox. Fortunately the other members of the family in which the case occurred were all protected by vaccination, and no other cases resulted. Reporter, A. R. Hancock, M.D., Farina, attending physician.—On the first of December, an unvaccinated public scholar at McLeansboro was found in the febrile stage of what proved to be an attack of small-pox, from which, however, she ultimately recovered. Source of contagion unknown. A large number of others were exposed, and, although vaccination was freely resorted to, six more cases followed, of which number two died. None of the seven had ever been vaccinated prior to exposure. Reporter, C. M. Lyon, M.D., McLeansboro, attending physician.—A fatal case of small-pox occurred in Alton, during the early part of December, contracted in St. Louis. Notwithstanding the case was not discovered until the eleventh day, and numbers of persons were exposed in the boarding-house where it occured, only one other case resulted—one of his nurses, vaccinated in childhood, but not successfully revaccinated until after nearly two weeks' exposure. This patient died on the fifth day, the disease assuming the rare form of purpura variolosa. Reporter, W. A. Haskell, M.D., Alton, attending physician.

TRICHINA.

Three outbreaks of trichiniasis—one of them resulting in three

deaths—have occurred, the first during the early part of November, in a family near Gardner, Grundy county; the second and third during December, in Woodburn, Macoupin county, and in Bloomington, respectively. The Gardner and Bloomington cases resulted from eating uncooked pork and sausage, and the Woodburn cases from raw smoked sausage. Specimens of the meat from Gardner and Woodburn were sent to the Secretary for examination, the character of the disease being only suspected, until the microscope showed, in one case, about 2,000, and in the other about 8,000 trichinæ to the cubic inch.

Dr. A. T. Darrah reports the Bloomington outbreak quite fully, and Drs. Taxis and Reid, of Gardner and Woodburn, respectively, have promised detailed reports of their cases. The matter, however, possesses little sanitary importance, except that it is well to put on record every authentic instance of the occurrence of trichiniasis and to determine its cause. Since 1866 I have noted every such instance in this State, and of the deaths resulting, which now number sixteen; and without exception they have been caused by eating uncooked or imperfectly cooked pork in some form. I see no reason to modify the opinion expressed in 1881, in reply to an inquiry addressed to me by a committee of the Chicago Board of Trade and the State Department at Washington, to-wit: That, as a sanitarian, I regard the danger of human life from trichinæ as practically amounting to nothing, it being so easily prevented by thorough cooking.

The investigations which have been made during the past four years, both in this country and abroad, show American pork to be freer from trichinous infection than that of other countries. The hog in every country is subject to the parasite; even the wild swine in European forests have been found infected, and an outbreak of trichiniasis in 1881, at the village of Khiam, near the sources of the Jordan in Palestine, was caused by the flesh of a wild boar slain in the woods near the village. Prof. Virchow is recently reported to have condemned the outcry against American pork, as utterly illogical, unnecessary and unjustifiable by sanitary reasons, and adds that "no case of trichinæ in American hog meat has been proved to exist in Germany for ten

years." Neither in Switzerland nor England has it been found necessary to interfere with the importation of American hog products; and yet in these countries their reputation is higher than ever before. It is only where the custom of eating raw pork obtains that severe or extensive outbreaks of trichinias occur. Such an outbreak was that at Emersleben, in Saxony, last fall. MM. Brouardel and Grancher, who made an investigation, found that it was not due to American pork at all, but that the trichinous hog, which was the origin of the disease, was born and reared in a stable at Emersleben, the offspring of an English boar and a native sow. Killed on the 12th of September, 1883, a slice of the carcase was eaten raw on the 13th by two men, who were taken ill on the 16th, and died a month later. Meantime, the rest of the meat, mixed with other, was minced up and sold between the 13th and 19th of September. Except by five persons, who cooked it a little, this minced meat was eaten perfectly raw, and within a short time there were two hundred and fifty persons sick, of whom forty-two died; and one hundred and twenty-six more cases, with eleven deaths, occured in neighboring villages among persons who ate sausage made by the same butcher. Trichinæ were found in abundance by MM. Brouardel and Grancher in the bodies of two of the victims. This is the most extensive outbreak that I know of; but as previously remarked, the question is one of economic and commercial importance, and in only a very limited sense has it any sanitary interest. Proper cooking will render the most badly infected piece of trichinous meat absolutely innocuous. Exposure to a temperature of 150 to 160 degrecs, F., is fatal to the trichina.

PRECAUTIONS AGAINST DANGER TO LIFE FROM FIRES.

The recent loss of life by fire at Belleville suggests the point whether the Board can profitably take any further action looking to securing adequate provision for escape from, and for the extinguishing of, fires in public buildings. On different occasions within the past few years the Board has called attention to this subject, the last time in the fall of 1881, with reference to the danger from fire at seaside resorts, and this was emphasized, soon after the Secretary's circular-letter was sent out, by the destruc-

tion of no less than six of these inflammable structures within a very short time. Fortunately, these fires occurred at a season of the year when there were only a few, in some cases no inmates, and nothing worse than the rapid destruction of the buildings and contents happened. These events, however, serve to direct attention to the subject, and there is reason to believe that this class of buildings is much improved in this respect. I think it would be well to prepare a suituable letter with necessary instructions, and address to all those having charge of public buildings in the State, with the view of publishing a report on the condition of such structures, with reference to the number of stories, sizes and arrangement of rooms, number and dimensions of staircases, doorways, windows and other exits, special provisions for escape, and for extinguishing fires, etc. Such a report would serve a useful purpose in disclosing to what extent municipal, State, or other interference may be necessary to correct such dangers as are found to exist.

CHICAGO SEWAGE.

In my last qnarterly report, speaking of the solution of the various questions hinging upon the disposal of the sewage from the city of Chicago through the Illinois and Michigan canal, I observed that that it was "clearly the duty of the city of Chicago, immediately upon the close of navigation, to have the Bridgeport pumps put into operation, and their capacity and the capacity of the canal determined by actual experiment." I am glad to say that this experiment is now being carried on, and I am in receipt of a telegram from Superintendent Thomas, announcing that the "Bridgeport pumps are working finely, and are holding three feet of water in the canal above the level of the Chicago river."

Respectfully submitted,

JOHN H. RAUCH,
Secretary.

Dr. McKenzie moved that the report be accepted, and that the recommendations and actions of the Secretary be approved. The motion was adopted and the report was ordered to be printed in the account of the proceedings of the meeting.

The remainder of the session was devoted to executive business, and the discussion of charges against individuals and colleges, of which the Secretary submitted 42 various cases, not previously considered. Among other matters, then disposed of, it was ordered that diplomas issued by the College of Physicians and Surgeons of Joplin, Mo., and by the Kansas City Hospital Medical College for the current session, 1883–4, could not be received as the basis for certificates entitling to practice in Illinois.

Drs. Haskell and Rauch were appointed a committee to draft appropriate resolutions concerning the retiring member, Dr. McLean, and subsequently offered the following:

Resolved, That the members of the Illinois State Board of Health who have been associated with Dr. John McLean, of Pullman, during the past three years, part from him with unfeigned regret upon the termination o his period of service. His counsels have been characterized by prudence good sense, and moderation, and prompted by an earnest desire for the best interests of the public welfare, and for the elevation of the standard of the medical profession. His sterling qualities must command success for him in any position to which he may be called; and the best wishes of his fel low-members of this Board go with him.

On motion of Dr. Bateman, who left the chair for that purpose the resolution was unanimously adopted; and the Secretary was instructed to forward a copy of the same to Dr. McLean.

The Secretary submitted the following:

STATEMENT OF EXPENDITURES OF THE ILLINOIS STATE BOARD OF HEALTH FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1883.

Salary of Secretary	$2625 00
Clerical services	4276 00
Traveling expenses of Board and Secretary	1112 92
Postage	354 56
Expressage	160 75
Telegrams	89 35
Stationery and Printing	152 25
Medical Journals, Books and Newspapers	186 80
Vaccine Virus	35 00
Sundries	108 68
Total	$9101 31

At four o'clock P. M., on motion of the Secretary, the Board adjourned the January meeting, *sine die*.

THE MICHIGAN STATE BOARD OF HEALTH.

The regular quarterly meeting of the Michigan State Board of Health was held in the office of the Board at Lansing, Michigan, January 8, 1884, the following members being present: Jno. Avery, M.D., of Greenville, President; J. H. Kellogg, M.D., of Battle Creek; Victor C. Vaughan, M.D., of Ann Arbor; C. V. Tyler, M.D., of Bay City; and Henry B. Baker, M.D., Secretary.

The recommendations to the Warden of the State House of Correction, by Dr. Jno. Avery, Committee on Buildings, Ventilation, etc., under date of September 7, 1883, for improving the ventilation of the shops at the State House of Correction, at Ionia, were ordered printed in the next Annual Report.

The Secretary read a resumé of recent work of other boards of health; also a summary of the work of the office of this Board during the last quarter, which showed that a successful sanitary convention had been held at Ionia; that partial arrangements had been made for holding one at Hillsdale; that the proceedings of the Muskegon, Pontiac, and Bay City Conventions had been printed; that special meetings of the Board had been called at the State Reform School to examine plans for a new building; at Detroit to attend the American Public Health Association; and at Ionia at the time of the Convention; that a leaflet on contagious diseases had been translated into French, Danish-Norwegian, and Swedish, for general distribution among citizens of Michigan, who speak those languages; that a very general distribution of circulars on communicable diseases and on the work of health officers had been made to the health officers of cities, villages and townships in Michigan; that similar documents were distributed at Ionia, and at the State Teachers' Association; that circulars, blanks, etc., had been sent to health officers and clerks of all cities, villages and townships in Michigan for their annual report, including that of the diseases dangerous to public health; that notice had been sent to health authorities in several parts of the State warning of the shipment of diseased cattle into such localities; that the regular distribution of weekly bulletins of sickness and of meteorology, the

yearly distribution of material for meteorological reports, and the quarterly distribution of blanks to observers of diseases had been made.

The Secretary presented reports from Dr. Hazlewood, who as committee of the Board attended the Sanitary Convention at London, Ontario, and the meeting of the Board of Corrections and Charities at East Saginaw. In connection with the first report, Dr. Hazlewood described the water supply of that city (London), and the Secretary, who also attended the Convention, described a visit to the Asylum of the Insane near London, Ontario.

By request of the State Board of Corrections and Charities, committees were appointed to examine and report on the sanitary condition of the jails, asylums, etc., in several counties in Michigan.

Drs. Avery and Kellogg were appointed a committee to investigate and report at next regular meeting on the sewerage, ventilation, etc., of the Capitol building.

A committee, consisting of Drs. Baker, Kellogg and Vaughan, were appointed to examine and report on the sanitary condition and needs of the State Reform School and surroundings.

Dr. Kellogg presented and read portions of a very interesting report on the present knowledge respecting diphtheria, which will be published in the next Annual Report.

Considerable discussion occurred over the examination of text books on physiology and hygiene with reference to alcohol and other narcotics. Only four books had been presented for examination. The committee reported relative to these books, and asked to be discharged; but the committee was continued, Prof. Vaughan added to it; it was directed to confer with a similar committee from the State Board of Education, and it is to report again at the next regular meeting of the Board, April 8. It is hoped that publishers of school-books will give early attention to this subject, and that more than one book can be approved at that time.

CHICAGO MEDICAL SOCIETY.

At the meeting of this society on the evening of January 7, 1884, Dr. J. G. Kiernan read a paper on "Perverted Sexual Instinct." Upon this topic the literature of the past was reviewed to a considerable extent by the writer, of which the following extracts have been taken, a part of the phraseology not being in very common use:

Casper was the first to call attention to the condition known as sexual perversion, but not until several works had been published by a Hanoverian lawyer, Ulrichs, himself a sufferer from the disease, did the matter become the subject of scientific study on the part of physicians. Westphal was the first to discuss it, and described two cases, one, a female, who, when a child, is said to have been fond of boy's games and of putting on male attire. From her eighth year she had felt drawn to certain girls and liked to express her love for them, kiss them, and induce them to let her touch their genitals. She came of a neurotic ancestry, and displayed somatic signs of degeneration; she had imperative conceptions, and displayed symptoms of insanity other than the perversion. His second case was a male, who felt attracted by males. Servals reported a case, that of a male, who in addition to sexual perversion was morally imbecile. Schminke and Scholz have reported cases in males. Westphal, in addition to the two cases above cited, has later reported an additional case, that of a male. Krafft Ebing, after citing four cases (all males), concludes, that the main symptoms of the condition are first congenital absence of normal sexual feeling, and at times repugnance to normal intercourse, although they appear sexually developed normally.

The sexual psychical phenomena are replaced by this perversion. Sexual desire appears early, and extends to the same sex, or at most, this feeling finds expression in mutual onanism, but as a rule, pæderasty is repugnant.

Tamassia and Legrand du Saulle have reported one case each —both males. Stork reports three cases; one displaying primary monomaniacal tendencies. Raggi has reported a case of what he calls sexual perversion in a male, who, from having enlarged breasts; created the delusion that he was a woman. Char-

cot and Mognan have reported one case. In this country, five contributions have been made to this subject; one by Dr. H—— (See anonymous contribution to New York *Medical Record*, April 18, 1881), who describes the case of a male; one by Spitzka, who deals with a historical case; one by Blumer, who describes in a very thorough manner the case of a male, in whom the perversion had very Platonic manifestations (a kind of love of which Plato was a great expounder). Shaw and Ferris reported one case, which, however, was not well observed; and one case by Wise, who describes the Lesbian loves (from Lesbos, an old Greek city) of two victims of this perversion.

The author has seen three cases, two of which were impure; the other, a female, aged 22, whom he describes as being of neurotic ancestry on the paternal side, her cranium and face being asymmetrical. The patient has always had a fondness for dressing in male attire, and she feels at times sexually attracted by some of her female friends, with whom she has indulged in mutual masturbation. These feelings come at regular periods, and are then powerfully excited by the sight of the female genitals. In the interval she manifests repugnance to attentions from men. She is aware of the fact that while her lascivious dreams and thoughts are excited by females, those of her female friends are excited by males. She regards her feeling as morbid. At times she is troubled by imperative conceptions, such as that if she turn her head around she will break her neck; in consequence, she carries her head in a very constrained position.

Regarding the cause.—Excluding the impure cases of Ulrich's, Dr. Kiernan stated that thus far there have been twenty-seven cases reported, *four females*, *the rest males*, which would seem to show that sex predisposed to the affection, but it should be remembered that a history of female sexual desire is not easily obtained, that in nearly every case a neurotic ancestral history was obtained, and that the condition then appeared to be congenital.

Treatment.—To remove this perversion is out of the question. Dr. Wise has recommended that all such cases be sent to an asylum. Krafft Ebing proposed that these patients be exempt from legal penalties and allowed to follow their inclinations when harmless

and when not violating public modesty. The case recited by the author he treated as if it were one of nymphomania, and by antaphrodisiac measures. He sought to strengthen the patient's will at the same time by instituting a course of intellectual training. The patient has been aided by these means so far as to be liable to control her perverse inclinations.

Dr. E. Andrews discussed the paper by saying cases of this kind occurring to people living in cities situated in the southern half of Europe are not regarded as cases of insanity, and in Italy many boys open a vicious trade to travelers, which, no doubt, is due to vicious associations there. Among the Latins and Greeks, and people living along the Mediterranean Sea, vicious habits of all sorts were practised 2,000 years ago, according to some works on ancient literature. In a certain saloon parlor in Paris there is exhibited a fine painting of a nude figure to represent a hermaphrodite, for certain kinds of lascivious purposes, and both sexes view it. Prostitutes frequently are known to be affected with chancroids on the verge of the anus, and the men frequenting the place often contract specific disease in the mouth.

Dr. R. E. Starkweather inquired of the essayist if he considered the cases that the newspapers had published so much recently about, occurring in Wisconsin, a *mutual* or mental disease? Both the persons are said to be females, and the latest report says that one is pregnant.

Dr. Kiernan thinks there is scarcely a civilized nation in which the vice is not practised; and this vice aspect is common in Asia, also in Naples.

Among the Pueblo Indians, one of their number is delegated as a pæderast. He, however, thinks these cases should be divided into two classes, one of which are vicious, the other perverted. Regarding the last speaker's interrogatory, he thinks we can reject the pregnancy part of the question; and then, too, in the case he alludes to we are not assured that both are women, for the scrotum of a man may be adjusted so as to elude detection: and other things being equal, a male person may dress in female clothing, and readily pass as such.

The discussion on this topic was then supplemented by a well prepared paper by Dr. Charles E. Webster, On Pott's Disease,

and who exhibited a mechanical appliance of his own invention, that he had manufactured for the relief and cure of dorsal caries. The apparatus was examined by the gentlemen present, and many of them endorsed it as being superior to the jury-mast and head-lift, it being far less cumbersome than the former, which is apparently always in the way. The paper is an original contribution, and differs somewhat from the literature upon this subject. A description of the apparatus and mode of application we cannot well illustrate without the aid of a cut of the same, and we are, therefore, obliged to omit giving the minutiæ of the invention, but take pleasure in giving some of the points of interest regarding the causes, pathology, and the mechanical problem in the treatment of chronic non-suppurative spondylitis. We will add, then, that the general health of the patient has been much impaired, whether it arises from a peculiar diathesis, or the result of the disease, although this may not be as pertinent to the present inquiry as the local causes which arise from irritation of various kinds. Thus, the motion of the heads of the ribs, the lateral, and back and forth motion between the vertebræ, and the pressure of the superincumbent parts, may add greatly to the crumbling of the spinal column; and this process, which lowers the head and shoulders, pressing the sternum forward and the spinous processes backward, continues until the capacity of the thorax is diminished, and curvature finally results. This condition progresses until the ribs reach the crest of the ilium, and the patient grows anæmic and emaciated, and ultimately the sad spectacle is that of deformity from the pathological process that has been going on until a patient will be presented to the orthœpœdist for treatment, for whom one of the first measures of importance consists in permitting him exercise in the open, invigorating air.

The indirect advantage of having the patient occupied by this pleasant pursuit is equally counterbalanced in a direct advantage to his general health, and if malnutrition or any other abnormal condition of the system improve, there is hope that the caries may be arrested. Good diet is also an adjuvant and *sine qua non* to the outdoor life. The capacity of the thorax, naturally diminished by the disease, is generally still more reduced by surgical (unwise surgical appliances) as we ordinarily see them

adjusted. The motion of the heads of the ribs in inspiration undoubtedly acts as an irritant. This can be readily prevented by constricting the chest, but for the reason just stated is inadmissible; on the contrary, it may even be necessary to encourage such motion at the expense of temporarily increased inflammation, for the sake of additional lung room. The prime factor in perpetuating the caries is downward pressure. This is constant while the body is in the vertical position, and it is therefore necessary to support the weight of the parts above the point of disease, to counterindicate the tendency of grinding out the bodies of his vertebræ, to overcome the crumbling spinal column and resist the toppling over in the direction of the least resistance.

The weight to be supported consists of the head, arms, and that portion of the trunk superior to the part of the spine which is diseased. The only part of the body affording a base of support for apparatus to sustain this weight is the pelvis, *i. e.*, in individuals whose hips are sufficiently flaring to give a proper base, and in this proposition lies the substance, as we are able to deduce it, in the treatment of advanced cases of Pott's disease, as promulgated in the paper. The apparatus constructed by the surgeon he has amply demonstrated by several years' trial, and its usefulness is superior to any of the braces heretofore spoken of. The cost is estimated to be from $25 to $50.

Upon motion, the society adjourned. L. H. M.

CHICAGO MEDICAL SOCIETY.

The regular semi-monthly session of this Society, January 21st, 1884, was held in the parlors of the "Pacific," and was of unusual interest.

Dr. Charles G. Davis read an exhaustive paper on our indigenous remedy, "Gelseminum Sempervirens." His preliminary remarks and the principal points in the paper were as follows:

The present advanced state of medical science is due in a great measure, if not entirely, to the recorded experience and observation of thinking men. If this be true, would it not be well if all physicians, engaged in the active practice of their profession,

made a special endeavor to observe more closely, and record more accurately, the various symptoms manifested by the action of medicine on the human system. A neglect of this on the part of many physicians has given rise to what we may properly term the "school of skepticism." They disbelieve entirely in the efficacy of medicine to relieve disease, and often, while manifesting a sublime indifference to the appeals of the poor sufferer before them to be relieved, they go into ecstacies over the pathology of the case, and are plethoric with theories in regard to the ultimate nerve cells or molecules wherein the disturbing action arises.

Be it understood, I cast no reflection upon scientific investigation in these directions. But the true office of the physician is to prevent, cure, or alleviate disease, and in proportion as he fails in this, he fails to fulfil his mission.

To-night I lay before you my recorded experience in regard to the action of a remedy which for a number of years has been under my observation.

Gelseminum Sempervirens commonly known as the wild, yellow, or Carolina jasmine, was first described in 1640, by John Parkinson, who grew it in his garden. (See the U. S. and other dispensatories for its properties, further description, etc., etc.)

The writer is thoroughly convinced there is no article of equal merit in the materia medica which has received so little notice, and concerning which so little is known; and the objects of the paper, as set forth, were to give a synopsis of the different theories concerning its mode of action with his own testimony added, especially in regard to its therapeutical application. This which is here synopsized from the paper based upon the personal experience of the author. The following anecdotemay not be devoid of interest. The manner in which, according to the chronicler of the story, the remedy was discovered, may have been, however, an accident.

A Southern gentleman, who was sick with a fever, sent his colored servant into the gardent to obtain the roots of a plant which he indicated, in order that he might prepare a decoction for himself, and alleviate his disease. The servant made a mistake, and obtained instead the roots of the yellow jasmine. The

tea was drunk, however, and the patient, breaking out into a profuse perspiration and recovering soon from the fever, made inquiry as to what he had taken, and was so delighted with the result that he immediately recommended it to others who were similarly afflicted.

However this may be, gelseminum owes its medicinal action to presence of an alkaloid, its active principle, viz.:—gelsemina or gelsemia; and to Prof. T. G. Wormly undoubtedly belongs the credit of having first isolated the alkaloid, who also demonstrated the presence of a new organic acid, which he designated gelseminic acid. By his method, sixteen ounces of the fluid extract of gelseminum yielded about two grains and a quarter of the of pure gelseminic acid, which is colorless, odorless, mostly tasteless, crystallizes in groups or tufts of delicate needles, has strongly acid properties, neutralizing bases, and uniting with them to form salts which are generally sparingly soluble in water.

Gelsemia may be extracted from the concentrated extract from which gelseminic acid has been extracted, by a process for a minute description of which see the various dispensatories, materiæ medicæ, works on chemistry, etc., etc. In general, the author stated, the amount of the alkaloid found in any given quantity of the fluid extract (the only officinal preparation used) approximately existed to the extent of one grain to two and a half fluid ounces of the fluid extract.

Physiological actions.—Gelsemia is so intensely bitter that its presence to the extent of one-thousandth part by weight in solution can be readily detected, and when taken into the system it is rapidly diffused into the blood.

In regard to its action on the human system, and also the lower animals, the following has been deduced from the author's voluminous paper: When administered in small quantities, sufficient to produce a sensible effect, it has a mild, soothing tendeney over the nervous system, manifested by mental quietude; a tendency to drooping of the eyelids; slight muscular relaxation; slowing of the pulse and slight dilatation of the pupil, though Prof. Ringer says this dilatation is preceded by contraction of the pupil. When the dose is much increased, the symptoms are all intensified, and we see manifested double vision; giddiness; pain

in the forehead; increased paralysis of the levator palpebræ muscles, causing drooping of the eyelids; labored respiration, from partial paralysis of the respiratory muscles; muscular weakness; and general sensibility is much reduced. If the dose is still further increased, the symptoms are still more intensified; the action of the heart becomes weak and intermittent; vision becomes entirely lost; pupils widely dilated, not responding to the action of light; consciousness may be retained until near the period of death, when it is lost from the carbonic acid poisoning resulting from incomplete respiration.

The action of the heart continues for some moments after respiration has ceased. From these symptoms it is evident that the prime action of gelsemia is upon the nervous system, and its action is such as to warrant us in classifying it as a cerebro-spinal depressant, acting principally upon the motor centers, although some doubt has been expressed that its primary action is upon the peripheral extremities of the motor nerves. Ringer at one time entertained this view of its action primarily upon the extremities of the motor sensitive nerves. In cold-blooded animals its first effect is on the sensory center, while in warm-blooded animals the motor centers are first impressed. The reader of the paper considered this fact to be of great importance, viz.: that the remedy lowers the temperature, which he had verified in many febrile and inflammatory diseases. The theory of its being an efficient antidote to poisoning by strychnia was, according to the views expressed by the writer, disproven, as he illustrated by experiments on dogs, and the contrary effect, he was satisfied to announce, was the result—that it facilitated or increased the action of strychnia. Two dogs were selected, weighing ten pounds each, to both was administered at the same time one-fifth of a grain of sulphate of strychnia hypodermically. Five minutes elapsed, and one-eighth of a grain of the alkaloid gelsemia in the form of a sulphate was given to one of the dogs. In ten minutes convulsions appeared in the animal, while the effects were not noticed in the dog that received only the strychnia until the end of thirteen minutes. In thirty minutes the animal that had received both poisons was dead, while the other lived forty minutes, and then too it was noticeable in the experiment

that in the animal receiving both the strychnia and gelsemia, the convulsions which appeared earlier were far more violent and continuous. This experiment was repeated a number of times with almost unvarying results. As antagonistic to and incompatible with the effects of gelsemium, we may rely upon alcoholic and diffusible stimulants, and, as an illustration, a case was cited that the author treated three years ago. J. B., æt. 45, had been afflicted with muscular rheumatism for a number of years, was given five drops of the f. e. gelseminum three times a day, with instructions to increase the dose one drop every day. In time a dose of twenty drops was taken every day, and not seeing any of the usual effects of such a dose I requested him to change his druggist. (It is well known that there is occasionally a druggist who is not infallible; and the drugs he offers for sale to a willing public, for which he often feels desirous also to prescribe are often to be placed in the same category). In two hours after acting upon this advice the patient was brought back to my office by a worthy officer who found the gentleman staggering on the street, and supposed him intoxicated, as he showed to a very marked degree the effects of the remedy. A tablespoonful of brandy was immediately administered. In fifteen minutes he was much improved. The same amount of the stimulant was repeated twice during an hour, at the expiration of which time the symptoms had entirely disappeared. Thiscase serves to illustrate the antidotal action of alcoholic stimulants to the poisonous action of gelseminum; also, what is true of many other of the fluid extracts—their great variation in medicinal action.

Therapy.—In its native southern region it has for many years had an extensive reputation as a remedy of great value in the treatment of autumnal malarial fevers. While its efficacy in this direction may have been overestimated, yet its beneficial effects in malarial fevers are such as to merit our careful consideration. After an observation of a number of years, and administering the remedy probably to many hundreds of cases, I have arrived at the following conclusions:

First. Gelsemium is not a direct antidote, either chemically or physiologically, to malaria.

Second. It does have a wonderful effect over the disease, owing to the relaxing influence it brings to bear upon the system, thereby increasing excretion and assisting to eliminate morbific matters.

Third. It may be regarded as the great adjuvant of the salts of cinchona, and in this direction, so far as malaria is concerned, lies its chief merit.

The following typical case, of which the principal points only are here given, illustrates this action.

A sign painter of bilious temperament, sallow complexion and melancholy expression of countenance, had ague at intervals for three years, of which the smallest amount of quinine, or any other of the salts of cinchona produced unusually severe cerebral symptoms. Was called to see him while he was seized with a terrible chill, simulating the congestive form. He refused the treatment that was suggested, and in forty-eight hours he was again prostrated with another more severe attack. When called to see him again he was partially unconscious in a congestive chill. After three hours' hard work, with dilligent use of stimulants, external heat, etc., reaction began. During the febrile stage, the f. e. of the gelsemium was given, freely reducing the temperature, and producing symptoms denoting its other effects. After eighteen hours had elapsed ten grains of quinine were given every two hours till 120 grains had been given. Not a symptom of tinnitus aurium was manifested, nor any other unpleasant symptom was noticeable. There has been no return of the disease from that day to this so far as is known. This is only one of a number of cases where the remedy was given to prepare the system for the action of quinine.

In Convulsive Diseases, particularly those where the spasm is dependent upon reflex irritation, this remedy satisfactorily fulfils the indications, especially in the various diseases of childhood where convulsions are manifested. The following illustration may not be devoid of interest.

Willie S—, aged 8 months, at supper partook of milk and mashed potatoes. The child was soon seized with convulsions, because the stomach failed to digest its contents. In three hours time there had been twenty convulsions according to the state-

ments of the attendants. Upon arriving, two drops of the f. e. were immediately given to the child, and in ten minutes two drops more.

Then ten drops were prepared in four ounces of water, and a teaspoonful of this was given every hour for twelve hours longer. No more convulsions appeared, and the next day the child was convalescent. No other remedy has such a satisfactory effect on the nervous system of a child during the period of dentition, while the entire system is disturbed from irritation of the distal extremities of the fifth pair of nerves.

As a remedy for *meningeal inflammation* of the brain and spinal cord, its efficacy in this class of cases the reader illustrated by citing a case selected from a number of similar ones that had from time to time been under his observation, and the large amount of the remedy that may be borne when the nerve centers are excited. When called to the bedside, the case (that of a young man) had already progressed four days, his temperature was high, pulse rapid and small, tongue dry, mind wandering, and there was severe spinal tenderness; the slightest disturbance in the room, or jar of the bed resulted in severe convulsions, which amounted to opisthotonos, occurring once or twice every hour. Bromides in large doses had already been given. The f. e. of gelsemium in five drop doses was then administered every hour for three hours, at which time another convulsion came on. Ten drops of the remedy were then ordered every hour. In three hours there appeared slight symptoms of another convulsion. The dose was increased to twelve drops, and gradually to fifteen drops, given as often, before there was entire relaxation and disappearance of all convulsive action. This dose was maintained for several hours before any toxic symptoms began to be manifest. The patient was then continued under the influence of small doses for a week longer, and later he recovered. Gelsemium has been lauded as a remedy for tetanus, but the author is convinced that it is of but little use in this condition. It has no effect within itself over epilepsy, but added to bromides, a desired result may be obtained more immediately and permanently in controlling cases of epilepsy confined to children.

The writer doubts its efficacy in cases of tic-doloreux or neuralgia, and thought it quite possible that the successful cases treated by the remedy by others were not tic, but neuralgia, resulting from cold or some other excentric causes producing congestion. Given in pneumonitis and pleuritis, it is beneficial, and will lessen or retard the inflammatory conditions by lowering the temperature, lessening the pulse rate, and it has a soothing effect over the respiratory functions. It has a marked effect over the mucous surfaces, in gastro-intestinal catarrh, dysentery, and inflammatory conditions of the urinary organs. In rattlesnake bites, no other remedy yielded such results, while the author was living in Kansas, some 12 years ago, where he treated a number of these cases. The local inflammation and pain rapidly subsided, and convulsions ceased after giving a few doses.

Favorable reports from several physicians to whom the remedy was suggested verify this. The remedy is given internally and applied locally, and in these cases its action, doubtless, is entirely physiological and not chemical.

In diseases of women, of which a variety were enumerated, he referred the application of the remedy to pelvic disorders and their attendant nervous disturbances, and it applies with equal force to both the acute and chronic states, for it possesses a relaxing effect over the uterus and its appendages.

In the first stage of labor, where there may be present a rigid and unyielding os, a similar administration will produce many times a most happy effect. In many forms of dysmenorrhœa its beneficial effects are equally noticeable. The author pictured many typical cases classified under the head of "nervous diseases;" "long continued congestions of the pelvic viscera;" "various phases of hyperæmia and anæmia of the spinal cord;" "hysteria;" "spinal irritation;" "neurasthenia," etc., etc., that were treated by all known therapeutical measures, including "local treatment," and while he did not claim it to be a never-failing remedy—a panacea—for all these conditions, he held that a large number of female diseases could be relieved by this remedy. In using it for a number of years, continued the writer, he was prepared to positively assert that gelseminum is a stimu-

lant or tonic to the cerebro-spinal system when long continued in small quantities.

Three chronic cases were cited of local troubles (ulceration) with serious nervous disturbance, in which all were relieved, in fact, recovered, by taking minute doses of the remedy. The first was where the patient had been treated for endocervicitis, retroflexion, retroversion, ovaritis, peri-uterine trouble, etc., etc.; menstruation had ceased. She was 35 years of age; all the functions were gradually restored, and in eighteen months she gave birth to a perfectly healthy child, since which time her health has been perfect.

Case Second was a remarkable one, a patient aged 45, with a decidedly neurotic history. There was hemi-anæsthesia, but this was not due to any cerebral lesion; there was ovarian tenderness; bowels constipated; frequent micturition; bearing-down pains; uterus enlarged and retroverted. She suffered severely with dysmenorrhœa, and sometimes the menses did not appear at all. She was approaching the "turn of life;" she had been married 20 years, but had never been pregnant. Her improvement was gradual and continuous by taking small doses of gelseminum, and in six months she appeared entirely well, menstruation being regular and normal. In three months longer she called again, for she was afflicted with nausea, and felt, as she expressed it, "so very strangely." Could she have conceived? Yes, possibly; and in due time "the wife and son were doing well," was the message sent me. Thus the pathological condition was removed, menstruation had returned, and pregnancy occurred at the age of 45 years.

The last case, that of a lady, aged 46, who consulted the writer some four years ago. Her case presented a number of interesting features. For eight years she had been in a "decline," and she became reduced in weight to seventy-five and one-half pounds. During the past five years she had been treated for typhoid fever, which once had attacked her and continued for five weeks. She has been treated also for sciatica, bronchitis, ulceration of the intestinal canal, disease of the pylorus, cirrhosis of the liver, diseased kidneys, hyperæmia of the brain, and the various flexions, versions, and inflammation of the uterus. My

diagnosis was given her, facetiously perhaps, by saying that "she was sick." There was a general failure of nutrition, restlessness; frequent attacks of neuralgia; depression of spirits; spinal tenderness; enfeebled digestion, and back-ache. Her menstruation had been very scanty and irregular for two or three years, and had not appeared for seven months. The gelseminum was given to her in minute doses. She began to improve almost immediately. At the end of the third month menstruation reappeared, much to our surprise, (her's as well as my own). In four months she gained 20 pounds, and in a few weeks longer her weight was increased 35 pounds, as was also her strength and general health, and menstruation still continues at this date, she having attained the age of almost 50 years.

As a remedy for noctural emissions, it was simply referred to in the paper; and given alone, not much benefit need be expected in this direction.

The writer stated the following in conclusion: If this remedy has any influence over the pelvic viscera which is directly due to an impression on the spinal cord, or upon the sympathetic ganglia. is doubtless a matter of some question, but it is highly probable that it has a tonic effect on the sympathetic ganglia, as well as the cerebro-spinal centers. He urged that the action of gelseminum over the disorders peculiar to women was a subject of great importance, and well worthy the attention of the profession. For a very large number of the pelvic disorders of women arise from a disturbed nervous system, which in turn produces morbid ovulation. It is in this way that I account for the action of gelseminum over these disorders. Its action is directly on the nerve-centers—spinal and sympathetic—equalizing the circulation and giving tone to cell power, and by these means permitting free ovulation, and relieving the congested and inflamed condition of the other pelvic viscera. If it does have this action, then Dr. Davis propounded the question, may it not also be considered a remedy for sterility?

The merits of the paper were discussed by Drs. G. C. Paoli, A. H. Foster, L. H. Montgomery, Robert Tilley and C. G. Davis, closing. These gentlemen's experiences and views ac-

corded in many respects essentially with those reviewed by the essayist, although none of them had used it in so large a variety of cases. After which Dr. R. Tilley read a paper prepared by Dr. E. F. Ingals, giving a report of A Case of Nasal Catarrh Caused by a Large Cystic Tumor, with Removal and Recovery.

Mr. V. had suffered from catarrh more or less for the past ten years, and been especially troubled during the past six months. There was difficulty in breathing, and obstruction of the left nasal passage, being able to inhale with considerable exertion, and unable to exhale at all through that side. His hearing was also impaired. His general health, however, was excellent. Upon investigating the naso-pharynx by means of the rhinoscope, a smooth, grayish-white tumor was noticed, completely occluding the posterior orifice of the left nares, and filling two-thirds of the naso-pharyngeal cavity, which evidently sprang from the lateral wall of the pharynx in the region of the fossa of Rosen Mueller. An attempt was made to remove the growth with a modification of Jarvis' écraseur, armed with a fine steel piano wire (No. 5). After several trials, I found myself unable to pass the loop over the growth, on account of its great flexibility. A larger wire was then substituted, and aided by the rhinoscope, the growth was secured and finally detached. It fell into the mouth, and was ejected by the patient. It measured $1\frac{3}{8}$x$1\frac{1}{8}$ inches in the largest diameters, and $\frac{3}{4}$ of an inch in thickness. A microscopic examination of the tumor was made by Dr. E. P. Davis, who pronounced it to be a mucous cyst. No after-treatment was deemed necessary.

Careful examination of cases of so-called catarrh should be made, as many are due to nasal polypi, hypertrophied turbinated tissue, adenoid vegetation in the naso-pharynx, or tumors. A wax cast of the pathological specimen was exhibited, and remarks passed upon the growth of this variety of tumors, and what may be other fruitful causes of obstinate and obscure cases of catarrh.

The society, at a late hour, then adjourned.

L. H. M.

Editorial.

Article VIII.

The Next Meeting of the British Medical Association.

The fifty-second annual meeting of the British Medical Association will be held on July 29, 30 and 31, 1884, at Belfast, under the presidency of James Cuming, M.A., M.D., F.K.Q.C.P.I., Professor of Medicine, Queen's College, Belfast.

The address in Medicine will be delivered by Sir Andrew Clark, Bart., M.D., F.R.C.P., Physician and Lecturer on Clinical Medicine, London Hospital.

The address in Obstetric Medicine will be delivered by Geo. H. Kidd, M.D., F.R.C.S.I., Master of the Coombe Lying-in Hospital, Dublin.

The address in Physiology will he delivered by Peter Redfern, M.D., F.R.C.S.E., Professor of Anatomy and Physiology, Queen's College, Belfast.

Visitors from America to attend this meeting can travel by any of the following routes:

1. A "Cunard" steamer will leave (*a*) New York on Wednesday, July 16, arriving in Queenstown about the following Thursday week, July 24. (*b*) Boston on Saturday, July 19, reaching Queenstown the following Monday week, July 28.

2. A "White Star" steamer will leave New York on Saturday, July 12, and on Saturday, July 19; due at Queenstown about July 20, and July 27.

3. An "Inman" steamer will leave New York on Tuesday, July 15; due at Queenstown about July 23.

4. An "Allan" steamer will leave Quebec on Saturday, July 19, arriving in Londonderry about the 26th or 28th of July.

5. An "Anchor" steamer will leave New York on Saturday, July 19; due at Londonderry on July 29.

Londonderry is 95 miles from Belfast, and trains run daily between the two places.

The route from Queenstown to Belfast is from Queenstown to Cork, Cork to Dublin, (165 miles by train), and Dublin to Belfast, (113 miles).

MEETING OF THE INTERNATIONAL MEDICAL CONGRESS, WHICH IS TO BEGIN AT COPENHAGEN.

The time of the meeting of the British Medical Association at Belfast, has been fixed so as not to interfere with the International Medical Congress, which is to begin at Copenhagen on the 10th of August.

A steamer will leave Hull, England, on Aug. 2 and 9 for Copenhagen, and on August 5 a steamer will leave Leith, Scotland, for Copenhagen. Both these places, Hull and Leith, can be reached on any day by leaving Belfast on the previous evening by the cross-channel steamers. Visitors after attending the meeting of the British Medical Association in Belfast, will have ample time to travel to Copenhagen for the Congress.

Communications in reference to the meeting of the British Medical Association at Belfast, to be addressed to the Hon. Local Secretaries John Moore, M.D.; Alex. Dempsey, M.D.; John W. Byers, M.A., M.D.

FOUR MILLION PIGS WITH BAD GRAMMAR AND WORSE LOGIC, BUT NO DISEASE.

Under the heading of "American Retaliation," the *British Medical Journal*, of February 9, 1884, prints the following paragraph:

"Although it has been proved, beyond the possibility of doubt, that ordinary cooking is a certain protection against the ill effects of trichinous pork; and that with a few quite insignifi-

cant exceptions, those people only have suffered who, like the Germans and Swedes, are in the habit of consuming bacon and ham in the raw state; and moreover, that, while the disease is very general among the Russian and German animals, no single case has been shown to have been caused by the use of American meat, several of the continental states, as France, Germany, Italy, and Austria, have been induced, by the agitation set up by interested traders, on the pretext of regard for the public health, to prohibit importation from the United States. Our transatlantic cousins have hit on a means of revenging themselves; and have introduced into Congress a bill to stop the importation of wines, liqueurs, etc., from all countries imposing restrictions on their trade in hams, etc., so long as these restrictions remain in force. At the same time the authorities at Chicago have determined on establishing a body of inspectors; but it is very doubtful whether much real security can be thus given, since not fewer than four million pigs are slaughtered there annually, at the rate of 1,400 per hour."

These words read to us as though they had been penned in Dublin rather than in London. If "no single case (of trichinosis) has been shown to have been caused (sic) by the use of American meat:" and if the disease is "very general among the Russian and German animals," why should the efforts made by the Chicago authorities to protect those who refuse to protect themselves by cooking the flesh of the swine before it is eaten be regarded as doubtful of effect?

Retaliation, moreover, is not revenge. The purpose of those American legislators who favor the passage of laws unfavorable to the importation into this country of wines and liqueurs, is not to punish, but to persuade; not to revenge nor to retaliate, but to teach the lessons of reciprocity.

Regulating the Practice of Medicine in Colorado.

The law which results in the survival of the fittest may yet be generally recognized as preëminently efficient for the regulation of medical practice. In a civilized community the victim of the charlatan dies, and the guilty man is merely handed over to the

almost impotent arm of a secular law, which is hampered greatly by the orthopœdic devices strapped to it by the ingenuity of "Sanitarians."

"They do these things better in" Colorado, according to the subjoined item which we find in one of the daily journals:

FREEPORT, ILL., Feb. 18.—News has been received here of the hanging, by a mob, near Denver, Col., of Eli Madlong, a former resident of Freeport. It seems that Madlong pretended to be a physician, although he had no medical education whatever, and was nothing but a quack. To one of his patients he gave a dose that killed him. The victim's friends organized a vigilance committee and hanged the man to prevent any further deaths at the pretended doctor's hands. Madlong was known here as a hard character. His father, a tailor by trade, still lives here, and is a nice old man.

THE French Academy and the French journals having discussed in a more or less excited manner the question of cold applications in typhoid fever for over a year, they are now in a heated debate over the stimulant action of beer and its use in hospitals. The director of public assistance in Paris has begun the attack with an order restraining the surgeon of hospitals from prescribing beer as a common tonic. The surgeons have declared war against this order and they have so far their own way.

ON account of the departure of the senior editor, Dr. Pilcher, for Europe, in January, and the expected departure of his colleague, Dr. Fowler, for a similar trip abroad, later in the season, the publication of the *Annals of Anatomy and Surgery* is necessarily suspended during their absence.

If circumstances shall seem to warrant the resumption of the journal with the beginning of another year, due notice will be given.

THE friends and admirers of Mr. Jonathan Hutchinson, F.R.S., of the London Hospital, have subscribed a fund for the foundation of a Hutchinson prize essay for clinical surgery, to be awarded every three years to members of the hospital of not more than ten years' standing from entrance.

Domestic Correspondence.

ARTICLE XIX.

MIFFLINTOWN, PA., JAN. 17, 1884.

MESSRS. EDITORS :—I was called, the night before last, to see a man and his wife who had been poisoned by eating Chicago canned corn beef. The circumstances were these :

The man is a laborer on the railroad. He returned from his work at 7 o'clock P. M. Shortly afterward they ate their supper, of potatoes, bread, and canned corned beef. At about 10 o'clock P. M., the wife was taken with sick stomach, vomiting, pain in stomach, dryness of throat, thirst, shortness of breath, weak and rapid pulse, and finally purging.

Between 11 and 12 o'clock, the man was taken with the same symptoms. I was sent for. Between 1 and 2 o'clock A. M. the violent symptoms subsided, and they made a speedy recovery.

The man stated that when he opened the can, he noticed steam or vapor escape from it. He said the meat tasted all right. I am unable to say whether the poisoning was from the beef, or from tin or lead. The symptoms were certainly those of tin or lead, but it is possible that imperfectly canned beef might undergo such change as to produce similar effects.

A few years ago, some persons here were poisoned in the same manner.

THOMAS A. ELDER.

THE NORTHWESTERN MEDICAL COLLEGE.

EDITORS CHICAGO MEDICAL JOURNAL AND EXAMINER :

[Special Dispatch to the St. Joseph Daily *Herald*.]

JEFFERSON CITY, MO., January 8.—The State Board of Health of Missouri, in session here to-day, fully exonerates the Northwestern Medical

College, of St. Joseph, from all charges against it, and recognizes it as standing on a level with the best schools of the State. There was a full meeting of the Board, assisted by Drs. Rauch and Taliaferro, of the Illinois Board.

Owing to the widespread publication in the secular press and the medical journals, last September, of a report that the Missouri State Board of Health had refused to recognize the diplomas of the Northwestern Medical College, thereby doing said college a grave injury and an unwarranted injustice, I transmit to you the above dispatch noting the action of the Board at its annual meeting, which, together with this note, I hope you will do me the favor to publish in your next number. It is sufficient to state further, that the information against said school, and upon which the September publications were predicated, proved, upon investigation, to be the work of an actively interested enemy of the school near at home, and one upon whose veracity any one knowing him would place no reliance.

Respectfully,

J. P. CHESNEY, M.D.,

Secretary of the Faculty.

St. Joseph, Mo., Jan. 15, 1884.

ELGIN, January, 18, 1884.

TO THE CHICAGO MEDICAL JOURNAL AND EXAMINER:

Vaccination as an immunity against small-pox I have great faith in. I also, from my own experience and observation, believe that once thoroughly done, a typical pustule is sufficient. Of course a small percentage will have varioloid after exposure. Small-pox itself will occur the second time in rare instances. My first experience with this disease as a physician was at Lake Zurich in this State. I had eleven cases, nine children, who never had been vaccinated, and the mother who had been in childhood. The mother had only varioloid. The father, who in youth had also been vaccinated escaped altogether. Two of the children died with confluent small-pox.

My next experience with this sickness was in New Orleans in the fall, winter, and spring of 1863-4. Here we had as many as

1,000 patients in hospital at a time—averaged that many for months. We were daily receiving new recruits at our wards and daily discharging them, not a few went to the grave.

Here then during all these months of hospital practice, I was in constant attendence on small-pox patients, still I was in uniformly good health and so was my family, notwithstanding I went home to them directly from the hospital daily. My wife and three daughters had been only vaccinated in youth. I am a firm believer in the efficacy of vaccination. But how many there are who think they have been vaccinated who have not been? Spurious matter has been used; or if good virus, it has been inefficiently done. The impression with many is that if they only have had a bad sore on their arm "it has took well," when in fact, in all such cases it never "took" at all. But who will pretend to portray the ill consequences of such spurious vaccination. Even when the matter is good, too much scarifying the arm lets the virus run out with the blood, making an ugly sore or ulcer, no sign of a typical pustule. This is no vaccination, even if the matter was good—a false security. I have had my attention called to the appearance of the arms in one week after the so-called vaccination, finding ouly an ugly looking sore, no signs whatever of any appearing pustule, yet they thought it was taking well because the arm was swollen and painful, as far up as into the axillary space. It has been my rule when I see a case of previous vaccination, showing a typical scar, to let what I considered well enough alone. Is is true, I suppose, that whereever vaccination shows a healthy process such might seem a risk of varioloid in case of exposure to small-pox. In these cases a paucity of matter may have been at first introduced into the system.

The immortal Jenner believed that once introducing the kine pox virus into the system properly by vaccination was sufficient. Heim asserts that there are no less than five spurious cow-pox viruses. Should not this caution us against the too frequent use of this matter? What reason have we to suppose that vaccination runs out "every seven years" or oftener. For now I believe it is getting fashionable to vaccinate every year in case there is any small-pox in the country. Why does not contagious

disease seize upon us (if we expose ourselves) as often as every seven years, or every year, as the case may be? Is it not fearful to be introducing into the human system by inoculation every few months some sort of matter, of the character of which we know little or nothing? How do we know but that we are introducing seeds into the system that will poison the blood of the patients and sooner or later cause the death of them? Especially when we consider that there was not one chance out of a million of the patients ever taking the small-pox. H. ROSECRANS, M.D.

MR. EDITOR:

The enclosed inquiries are addressed to you by the American Association for the Cure of Inebriates, which was organized in 1870, for the purpose of studying the nature and causes of inebriety from a purely scientific standpoint.

The purpose of these questions is to gather the practical experience and observation of leading members of the medical profession, as a basis for a more accurate knowledge of the nature and character of inebriety.

Full answers to these inquiries, and other facts relating to this subject, are most earnestly solicited, and will be fully credited to each reporter. The results of this investigation will be sent to each one free when published.

Trusting to hear from you soon, I am, with thanks,

Very truly yours,

T. D. CROTHERS, M.D.,

Sec'y of Committee and Editor of *Journal of Inebriety*.

P. O. Address: Hartford Conn.

Can you give any facts, from observation, bearing on the heredity of inebriety, particularly as to the presence of Insanity, Epilepsy, Phthisis, Inebriety, or other neuroses in the parents or relatives of inebriates?

Give cases with histories if possible?

Can you give any history of inebriates whose drinking dated from or was influenced by head injuries, sunstroke, syphilis; or could be traced to mental shock, disease or injury of any kind; also, to over-work, nervous exhaustion, anæmia, and any specific causes which broke down or injured the system?

Have you seen any cases in which insanity or epilepsy either preceded or followed inebriety? If so, was it traced to the use of alcohol alone, or was it due in part, or in whole, to some inherited or acquired diathesis?

Have you noted any distinction between the different forms of inebriety, such as irregular, continuous, or periodical inebriety? State any facts you have noticed which relate to the periods and forms of drinking?

What particular mental and physical changes have you noticed concerning the character and general health of the inebriate that would suggest the idea of disease and the need of physical care and treatment?

Have you noticed any form or condition of inebriety that seems to be produced or is largely influenced by the kind of alcoholic drink used, or the work engaged in, or the food or climate, or any other unsanitary surroundings?

Illustrative cases concerning any of these inquiries will be welcome, and a full expression of opinion from observation and experience is urgently requested.

HARTFORD, CONN., Jan. 22, 1884.

ARCHIVES OF DENTISTRY. — An association of dentists has been formed for the purpose of publishing a dental journal under the above title. This association is being incorporated, and has purchased the *Missouri Dental Journal* as a starting-point upon which to establish the new enterprise.

The editorial work of the journal will be directed by the association, and the editorial staff will comprise representative men chosen from all sections of the country. Its course will be outspoken, fearless, and progressive, and, as its name indicates, will aim to record all important events connected with the current history of dentistry. Its pages will be open to a full and free discussion of all subjects relating to dental science and art, and also those of related sciences. An earnest effort will be made to produce a journal that will be acceptable, if not indispensable, to every dental practitioner.

The plan adopted contemplates the publication of this journal simultaneously in the cities of Chicago, St. Louis and Atlanta.

For the present, all communications should be sent to the Dental Journal Association, 48 S. Clark Street, Chicago, Ill., 405 N. Third Street, St. Louis, Mo., or 3 White Hall Street, Atlanta, Ga.

The subscription price of the new journal will be two dollars for the year 1884, and three dollars for each year thereafter.

This advance circular is sent to you with a view of informing you of the action already taken, and of soliciting your coöperation in the work.

THE DENTAL JOURNAL ASSOCIATION.

Reviews.

A COMPLETE HANDBOOK OF TREATMENT, Arranged as an Alphabetical Index of Diseases. Containing nearly 1,000 Formulæ. By WILLIAM AITKEN, M.D., F.R.S. 12mo, cloth, pp. 444. New York: Bermingham & Co. 1882. (Bermingham's Medical Library). $2.00.

The author of this little book is widely known through the medical world as the writer of the long celebrated "Aitken's Practice,'" and for those familiar with the latter work, the one in hand is at least superfluous. But, as all practitioners and most students cannot afford the leading treatises on practice, and as special works on pathology and diagnosis are readily accessible, the present volume of treatment is likely to become, as it well deserves, a most popular book with medical students.

The alphabetical arrangement of each article is a commendable feature which will be best appreciated by the busy practitioner who is in the habit of reading the treatment of each obsolete disease as a new case presents itself, and cares little for the pathology of the same. It is a well-known fact, that it is not so much a clear understanding of the case which establishes the reputation of the doctor, as a successful mode of treatment. Ten years ago, the mind of the profession was absorbed in the study of the pathological changes accompanying diseases to such an extent as to nearly forget that there was a remedy for each evil; but of late, the works of Bartholow and of Ringer in therapeutics, and the introduction of the antiseptics in surgery, have wellnigh made an entire revolution in the treatment of disease, and the sooner the practitioners of medicine adopt such methodical therapeutics as are laid down in this book, the better for their patients, and for humanity at large. H. D. V.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY, AND ALLIED DISORDERS OF THE MALE SEXUAL ORGANS. By SAMUEL W. GROSS, A.M., M.D. Second edition, thoroughly revised, with 16 illustrations. 8vo., cloth, pp. 176.

This is an elegant monograph which has become celebrated as much for a peculiar idea of its author as for its intrinsic value. This idea is thus expressed in the preface to this second edition:

"As was stated in the first edition, of the affections discussed in this brochure at least two—impotence and spermatorrhœa—are commonly described as functional diseases of the testicles; while, according to my observations, they usually depend upon reflex disturbances of the genito-spinal center, and are almost invariably induced or maintained by appreciable lesions of the prostatic portion of the urethra, which, as they may not be perceived by the patient, are frequently overlooked by the physician."

This is the old theory of Lallemand revived and better supported, and so also the latter's treatment, applied with some improved methods, is highly recommended.

Unusual attention is appropriately given the subject of sterility in the male. In the chapter on Sterility, the abnormal conditions of the semen and the causes which deprive it of its fecundating properties are fully considered—a portion of the work intended to supplement the subject of sterility in the female. "From answers to letters addressed to many of the most prominent writers in this country on gynæcology, I find that, with few exceptions, the woman alone commands attention in unfruitful marriages. The importance of examining the husband before subjecting the wife to operation will be best appreciated when I state that he is, as a rule, at fault in at least one instance in every six."

We have read this practical and fascinating little book with unusual interest, and we found it full of valuable hints, although its perusal did not impart a conviction of the frequency of prostatic lesions, or of the prominence of masturbation as a cause of stricture, and it is possible that the views of the author may lead to unduly severe treatment in the hands of the quacks who monopolize in the large cities the specialty of venereal diseases.

At the same time we are well aware of, and desire to enforce the statement, that this is a most valuable monograph, which every practitioner ought to take cognisance of, for it throws much light on a subject as important as it is neglected.

H. D. V.

HANDBOOK OF THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT, NOSE, AND NASO-PHARYNX. By CARL SEILER, M.D. Second edition. Thoroughly revised and greatly enlarged, with 77 illustrations. 12mo., cloth, pp. 295. Philadelphia: Henry C. Lea's Son & Co., 1883.

This is a little volume of rare merit, and few superfluous words will be found in its interesting pages. The well-earned reputation of Seiler, and his numerous communications to the medical press, render an extensive critique of his work useless, except in so far as it is advisable to state the various articles which it contains. The first chapter treats of the laryngoscope; the second, of the art of laryngoscopy; the third gives the anatomy of the parts; the fourth, the various instruments used besides the laryngoscope. Then comes catching cold, acute laryngitis, functional disorders of the larynx, neoplasms, pharyngitis, hypertrophy of tonsils, coryza, nasal catarrh; a comparative diagnosis of the preceding affections, and a bibliography.

Although so concise, it seems that each chapter is complete, and conveys the proper idea of the disease and its best modes of treatment. One feature of this book, which belongs in common to all the works published by Lea, is the clearness of type and of illustrations, the fine quality of the paper, and the neatness of the work. Of course, this treatise is better adapted for students, and not so well for practitioners, as some of the larger works treating of the same subject.

H. D. V.

A PRACTICAL MANUAL OF THE DISEASES OF CHILDREN, WITH A FORMULARY. By EDWARD ELLIS, M.D. Fourth edition; revised and enlarged. 8vo., cloth, pp. 218. $1. New York: Bermingham & Co., publishers, 1882.

The well-known work of Ellis on Children here appears in a

cheap form of crowded pages, a result of free trade in foreign books. No doubt, many poor practitioners will profit by that, as it is really wonderful that such a valuable book could be presented to them for the price of a dollar, and every practitioner, as well as student, should place it on the shelf of the library, for future reference at least. Indeed, few of the larger treatises on the subject contain as much diversified matter as this, and hardly any work on practice ever was written so methodically, and with as much regard for the practical side of treatment. H. D. V.

THE HEALTH OF DR. WILLIARD PARKER.—Dr. Parker, as many of our readers are aware, has been the subject of a number of attacks of illness during the past year or more, which have given rise to solicitude. He was lately seized with an acute sickness, and again there has been occasion for anxiety. Some improvement is now reported, and we trust that his exceptionally vigorous constitution will lead to his speedy recovery.—*N. Y. Med. Jour.*

ON Feb. 1, 1884, the New York Post-Graduate Medical School, at which, since its foundation, 140 students have availed themselves of the vast amount of clinical material placed at their disposal, will take possession of more commodious accommodations located on E. Twentieth St. This change is the more fortunate, as the building to be occupied is of such proportions as to admit of the establishment of a hospital service.

WE can state to our happy surprise that our Southern medical brethren are making a rapid progress in medical journalism. In Mexico the *Revista Medico-quirurgica* shows in its first number that this journal will be conducted as a first class journal, and the new journal of Caracas, *El Ensano Medico* proves the medical progress of this State.

GENEROUS RECOGNITION.—It is said that the Emperor of Brazil has given Prof. Lacerda $20,000 for his discovery of permanganate of potassium, hypodermically injected, as an antidote for the bite of the cobra.

Translations from Foreign Exchanges.

By O. STROINSKI, M.D., CHICAGO.

NEW OBSERVATIONS ON DECAPITATION.

Frishjof Holmgren, a Swedish physician, has reported to the Medical Society of Ujosala his recent observations on decapitation. In the first execution, the eyes of the decapitated were widely opened and the pupils contracted, three seconds after the blow; twenty seconds after decapitation they commenced to dilate, and dilation was complete two minutes afterwards, after which the eyes turned to the right and upwards twenty-five seconds later. The reflex movements commenced forty-four seconds after decapitation, by slight twitchings of the muscles of the neck, and there was then a violent contraction of these muscles. The mouth was thrown downwards and to the left side; the tongue seemed also to be turned to the left, and a few seconds afterwards the mouth, which had been widely opened, closed slowly. After a few slight contractions of the muscles of the face, a complete rest ensued one minute and forty-four seconds after decapitation. From the surface of the dissected neck the blood streamed one meter, and thirty-five seconds afterwards the blood flowed in cascades. On the body no movement was noticed. In the second execution, the author was placed in front of the culprit during decapitation. The flow of blood was thrown out in a jet of 1 m. 33 c.m. The author concludes that in decapitation the sensibility disappears instantaneously, and that decapitation is entirely painless.—*Hospitals Tidende.*

SPONTANEOUS RUPTURE OF THE ABDOMINAL WALLS, WITH PROLAPSE OF THE INTESTINES, IN INGUINAL HERNIA.

The patient, a woman 54 years of age, is living in very poor

circumstances, her food consisting of potatoes and adulterated coffee. The woman is, therefore, emaciated and anæmic. She acquired an inguinal hernia ten years ago, which has augmented by continuous labor to the form of an oblong sac, hanging down between the limbs. From the lowest point of this sac, a serous fluid began to issue about a year ago. At 7 o'clock in the morning, while visiting a neighbor, the sac ruptured with audible detonation, and she fell down to the floor; but recovering quickly, she took the prolapsed intestines into her apron, and went home. The intestines were exposed to the open air from 7 o'clock in the morning to 2 o'clock in the afternoon, and the patient complained of intense pains in the region of the stomach. There was constant vomiting of greenish fluid. Pulse 86; tongue dry; temperature normal; sensorium free. Two c.m. above the os pubis, and parallel to it, there was a rent in the abdominal walls eight c.m. long. The walls were very attenuated, about the size of cards; the margins of the wound livid, tinged with blood, and very lax. The skin which had formed the sac was full of wrinkles, and as large as a child's head. The prolapsed bowels belonged to the small intestines, the omentum not visible. The loops of the intestines were so numerous, that it could be said with certainty that the whole structure of the small intestines was outside the abdominal cavity. They appeared as a dark blue mass, and they were viscous and cold. The applied apron was saturated with a bloody, serous fluid. The patient rested with her legs on a part of the intestines, and compressed them, but they were not injured. The space into which the intestines had to be removed was diminished by retraction, and it was only by careful reposition of each and every loop that the whole mass could be replaced. The skin was then elevated to a large fold, and deep sutures were applied, with some superficial ones afterwards. While the patient was collapsed and the pulse very low, wine and strong coffee was given. After two days the vomiting had ceased, but there was tympanitis without pain in palpation. The skin was hot; pulse 92; temperature 104; urine passed freely. Four days afterwards the bowels had moved freely, and complete recovery was restored after a short time.—*Serzst. Intellegenzbl.*

GANGRENE OF THE BLADDER, BY A RETROFLECTED UTERUS, IN THE FOURTH MONTH OF PREGNANCY.

A servant girl, 40 years of age, and not married, suffered from retention of urine for two days. She had always been healthy and the menstruation regular, until two months ago. Since that time she suffered from pains in the lower abdomen. The urine passed but scantily, and she had severe headache when the fæces were retarded. The patient denied energetically having had any intercourse, and the hymen was intact, but there was a round sensitive body in the posterior part of the vagina, and the cervix could hardly be reached. The patient was of a small rachitic form; the face suffering from pains; there was icterus, and the pulse 120; the abdomen very sensitive, and the bladder reached as far as half an inch below the umbilicus. Diagnosis: retention of urine caused by a retroflected gravid uterus. The uterus was replaced by the rectum, and the patient placed on the side forwards. The bladder was emptied every 6 hours by the catheter. On the third day the urine suddenly appeared to be bloody and fetid, and the uterus being constantly found in the fornix vaginæ, a pessary was inserted, but soon withdrawn, on account of pains. Now all the symptoms of peritonitis purulenta set in. After 4 days, a fœtus was expelled with the placenta, but the uterus remained in retroflexion. From this time on, the urine could not be withdrawn by the catheter; the openings in the latter were occluded by dark brown membranes. The spontaneously voided urine had an intensely fetid smell, and gangrene of the bladder was diagnosticated. The autopsy confirmed the diagnosis. There was a good deal of pus among the adherent intestines. The bladder was adherent in its whole length to the abdominal walls, and its fundus reached as far as the umbilicus. It was not possible to separate the bladder from the abominal walls or the intestines. The uterus was retained in the sac of Douglas by fibrinous adhesions.—*Memorabilien.*

FRACTURE OF THE CRANIUM IN A CHILD FOUR MONTHS OLD.

The child fell from the lap of the mother to the floor, a distance of about 75 c. m., and on the left side of the head. Five days afterwards there were symptoms of traumatic meningitis, *i. e.*

convulsions, contraction of the left arm, etc. The child died in a week. There was neither a swelling on the head nor a bloody spot. The autopsy proved the meninges to be filled with pus on the whole surface of the brain, and there was a fracture running from the callous portion of the temporal bone, over the left parietal bone, with a fissure running vertically to the sagittal suture. These cases are very rare, and the physician is often deceived in visiting the child and not noticing any symptoms to the fourth or fifth day, when death quickly sets in.—*Journal de Médecine et Chirurgie pratiques.*

XANTHELASMA.

The patient, a woman 25 years of age, had suffered from icterus for the last two years, and had pruritus. The xanthelasma was found on all parts of the body except the trunk, and it was formed of irregularly marked spots of the size of a bean to that of a half-dollar. They were either at the level of the skin or a little elevated, and of a whitish or yellowish color. On the inner part of the elbow and knee-joints, and on the dorsal side of the hands and feet, there were small nodules, either single or conglomerated in plaques, and only movable with the skin. They were formed by a hyperplasia of the upper layers of the cutis, especially of the papillary body, with enlargement of the papillæ, with local development of fatty masses in the lateral parts of the papillæ, and finally, a development of round, oblong, or otherwise shaped masses of free small granular bodies (pigment).—*Deutsches Archiv. f. Chir. Medicin.*

SOME CASES OF INTOXICATION BY NAPHTHALINE.

A boy 18 years of age, was bitten in the right arm. There was considerable swelling of the arm, but without affection of the glands. A large incision had to be made, and the wound was filled with pulverized naphthaline every day. After three days, there was erysipelas, and the urine contained albumen and formed cylinders. The arm was now put in a warm water bath, and the symptoms disappeared. A hackman 32 years of age, had a large wound on the dorsal part of the foot. The wound was filled every day with pulverized naphthaline. After nine days, the patient suddenly had a high fever; urine dark-colored; head-

ache and loss of appetite. A warm water bath restored the patient. The third case was that of a man whose right foot had been amputated on account of caries three years ago. There was now caries of the toes and the bones of the middle foot on the left side. This foot was then partially amputated, but the flaps from the sole of the foot became gangrenous. After the application of naphthaline for 5 days the wound looked exceedingly well. For about a month he was treated with an ointment containing 25 per cent. naphthaline. Suddenly high fever set in, with considerable thirst, loss of appetite, and prostration; great excitement, with attacks of mania. The naphthaline was not applied afterward, and in a week all the symptoms disappeared.— *Med. Chir. Centralblatt.*

GALL-STONE IN RELATION TO CANCER OF THE GALL-BLADDER.

Carcinoma of the stomach is often found to be developed on the round ulcer of the stomach, and the following case shows clearly that cancer of the gall-bladder is often developed on the lesions produced by calculi, the traumatic origin of cancer being also here corroborated. The patient, a woman 66 years of age, complained of loss of appetite for three weeks, and there were pains in the right epigastric region, the fæces being white and irregular. There was icterus of the skin and conjunctiva, the arteries being enlarged. The liver was large but smooth, its margin rough; in the region of the incisura cystidis felleæ there could be palpated a hard body of the size of a hazel nut, with large margins; the urine contained gall elements. At the apex of the heart a systolic murmur. The gall-stone could be distinctly palpated for three weeks, but after the fourth week it had disappeared. The patient then became œdematous, and on the surface of the liver were now some nodules. The diagnosis was cancer of the gall bladder. The autopsy proved the development to have taken place from the calculus and the scars which were formed by its lesion. There was also cancer of the liver and the right ovary.— *Wiener Med. Wochenschrift.*

A RARE FORM OF RACHITIC THORAX, WITH PERVERSE RESPIRATION.

The child, 13 months old, was in a dying condition when seen, and had the following abnormal formation: Between the line drop-

ped from the sternum and axilla of the right and left side, from the lower margin of the second rib down to the false ribs, the thorax was deeply impressed, forming thus two large cavities. The distance of the lower points of these curvatures was 9 cm. From the middle diameter this arc flattened up and downwards. The form of these cavities was that of a canoe, and it looked as if these lesions had been criminally made by seizing the child with four fingers of each hand on the chest, and the thumb on the back, forcible compression being performed. The brutality of the parents indicated this theory, but by experiments made on animals it was proved to be impossible. The inspiration, which was very short, was followed by symptoms of intense pains, and expiration was sudden and quick. In each inspiration the apex of the thorax became dilated, while the cavities were deepened. The bones of the thorax were so soft, that auscultation and percussion was impossible. The parenchyma of the lungs was nearly entirely destroyed.—*Wiener Med. Wochenschrift.*

ACTINOMYCOSIS IN MAN.

The patient, 21 years of age, suffered from asthma, cough, fever, and emaciation. After a few months several abscesses formed on the back, and there was a pleuritic exudation on the right side. On incision of one of the abscesses, a thick pus escaped, which contained actinomyces. Death followed, by perforation into the bronchial tubes. In the autopsy, the muscles of the right thorax were found to be covered with large abscesses and fistulæ, which were in connection with the right pleural cavity. Right lung gangrenous, and numerous actinomyces were in the abscesses. Left kidney changed into a large actinomycotic mass.—*Zeitschr. f. Allgem. Med.*

ANEURYSMA TRAUMATICUM OF THE RIGHT FEMORAL ARTERY WITH OPERATION IN TWO SESSIONS; RECOVERY.

A farm hand, 23 years of age, was wounded in the right upper leg with a knife. There was considerable hæmorrhage and muscular contractions in the wounded and in the other healthy leg. Compression was made and the leg then bandaged. Repeated hæmorrhages for the next three days, always followed by muscular contractions and convulsions. The patient was then very anæmic, and on the fifth day a pulsation in the wound was noticed.

On the sixth day the contractions and convulsions were most intense, and they were only relieved by large doses of morphine. Compression of the femoral artery below Poupart's ligament. The tumor grew slowly, notwithstanding continued compression and the internal use of ergotine. After a month high fever set in, with hæmorrhage of the lungs. After about six weeks the aneurysm extended from about 6 cm. above the patella to the inguinal fold. There was collapse after seven weeks, and the patient was revived by hypodermic injections of ether. Then it was concluded to make the operation. An incision was made between spina ossis ilei and symphysis pubis in longitudinal direction, and 5 cm. long. The artery was ligatured twice in a distance of $1\frac{1}{2}$ cm. with catgut, no hæmorrhage. The wound was closed by catgut, and antiseptic treatment applied. Four days later, the sac of the aneurysm was opened, Esmarch's bandage having been applied. An incision of 20 cm. was made above the sac and the latter opened. A great quantity of blood clots escaped and there was considerable arterial hæmorrhage, which resulted from the presence of three arterial branches running into the femoral on the posterior wall of the artery and just opposite the wound. After these branches had been ligatured the hæmorrhage ceased entirely. The sac was then filled with carbolized cotton, and three sutures applied. On the next day there was a chilly sensation below the knee, and the pulse varied from 80 to 92 in the next three days The wound on Poupart's ligament healed per primam. Powdered iodoform was applied to the other wound for the next week, but inflammation with gangrene of the patella set in. Boracic acid produced a quick restoration of this part. The patient was in the hospital 197 days, high fever setting in at intervals, but the leg was entirely restored to healthy action, six weeks' treatment with the electric current included.—*Ærzte Intelligenzblatt.*

Syphilis of the Brain.

A telegraph operator, 45 years of age, and of healthy parentage, suffered from chancre and bubo twenty years ago. Six years afterwards there was a protrusion of the tibia with intense pains. Three years later he acquired another chancre, but which healed

readily. After two years there was an eruption on the skin of the left side which resulted in a cuneiform ulcer. This eruption spread over the whole body, but no other ulcers were formed. At this time he noticed that his walk became unsteady and he began to stammer. The status præsens is now as follows: The skin of the body is covered with red nodules, aggregated in some parts to circular rings; the left tibia swollen; paresis of the right facialis; the tongue is thrust to the right side; the right palate is a little lower than the left. The bulbus of the right eye is somewhat protracted in its movements; the voice stammering. The right upper extremity shows the symptoms of severe ataxy, so that the patient can bring the hand to the mouth or the forehead by curving it in a certain way. The right lower extremity is paretic. The diagnosis is syphilis of the brain. By the internal use of iod. of potass. the syphilitic psoriasis disappears. After two months the patient is entirely restored.—*Med. Chir. Centralblatt.*

ENCEPHALITIS CONGENITA.

In the medical society of Berlin, Prof. Virchow demonstrated the brains of children with encephalitis congenita, having examined in the last year the brains of 44 new-born children. The neuroglia cells were swollen and partially fatty degenerated. The process is so often found in the inner substance that Petrowski believed the process to be a physiological one. But among the 44 brains only 27 showed symptoms of inflammation, and the pathological character of this encephalitis is evident from the fact that the inflammatory process occurs not only in the diffuse state, but that it is found in groups, the nerve filaments degenerating at these places. A process which produces large degenerative layers is not a physiological one. In France the process is believed to be a nutritive irritation, but this cannot be from the aforesaid facts, and while it is not known that fat can be formed by atrophy of nerves. The process has, therefore, to be regarded as a true ante-partum inflammation.—*Wiener Med. Wochenschrift.*

THE TREATMENT OF URÆMIA.

Since it is known that uræmia is caused by retention of urea

in the blood, various and very different methods have been recommended for its treatment. Inhalation of chloroform, purgation by salts, diuretics and injections of pilocarpine are applied to remove the urea in different ways. The diaphoretics are not apt to sufficiently remove the urinary matter by the skin, however large the loss of water may be. Diuretics are without effect in cases of acute nephritis and mechanical obstruction, and it is therefore necessary to consider the anatomical changes in the kidneys in every case. If uræmia occurs suddenly, cold packings and injections of pilocarpine are indicated. If the pulse is small, injections of ether or camphor must be made. The good results of chloroform inhalations in cases of acute uræmia with convulsions are generally known, and they are produced by the excessive exhalation of nitrogen in the narcosis. If uræmia is slowly developed, as in chronic nephritis, the therapeutical means should be of a prophylactic character, seltzers, acetate of sodium and other light salts being given in large doses. If in these cases a sudden attack occurs, the treatment must be regulated according to the pulse. If the latter is suddenly small and thin, digitalis will be the remedy, the cause of the attack resulting from insufficience of the hypertrophic heart.—*Berl. Klin. Wochenschrift.*

THE TREATMENT OF PHTHISIS.

Dr. Edgar Kurz, of Florence, Italy, makes the following interesting statements: The hypothesis of the bacillary origin of tuberculosis and phthisis has nothing to do with its treatment, the anti-bacillary treatment having entirely failed. It is furthermore not proved that a healthy person living in normal circumstances will be infected by a tuberculous person, and in hospitals the phthisical are not in separate wards, as in other infectious diseases. If the bacillus Kochii needs for its development so many different conditions to affect the lungs into which it easily enters, it must be a bacillus quite different from all the others, which develop in a short time and destroy the life. In the miliary tubercles of the peritoneum the bacillus has not been found. Lately arsenic has been recommended in the treatment of phthisis "to break up the bacilli," and one scientist has ex-

actly described the way in which this is done in the body. But arsenic has been given in tuberculosis in Italy for hundreds of years, and its action has been long known, *i. e.*, by improving the breathing and nourishing the nervous and muscular tissue. Milk diet has been recommended for a long time, and it has to be applied in the future, whatever the bacillus may do. Iodoforme has had a good effect in some cases, but the most patients could not stand the smell of the iodoform, and inhalations with it are a torture for patient and physician. In some cases of laryngitis and ulcers of the larynx, the powdered deodorized iodoform may be applied with good results, but only so far as it induces the lungs to gymnastic action. In hæmorrhage the best remedy is ergot in large doses. Against the fever, quinine is the remedy *par excellence*, salicylic acid producing other complications. In some cases where the fever was produced by resorption of pus, inhalation of carbolic acid acted promptly. Kairine was always followed by aggravated symptoms. It is not always commendable to reduce the temperature of the patient, there being certain conditions where a reduced temperature aggravates the other symptoms. The cough is treated with morphine and apomorphine, each 0.05 in 150.0 water. Oil of turpentine, carbolic acid, kreosote and eucalyptus, used as inhalations, are in some cases of beneficial effect. The best inhaler is Oertel's, which works at a distance of two feet from the patient. Forced nutrition by the (stomach sound), œsophageal tubes is very seldom applicable. The night sweat is readily reduced by the old forgotten remedy, agaricus albus, in doses of 0.5 to 1.0. The disease is a social evil, and it will not be reduced by microscopical or chemical examinations.—*Memorabilien.*

Case of Intense Hysteria Cured by Oöphorectomy.

Oöphorectomy, *i. e.*, the extirpation of the ovaries, has not produced the results expected, and it has therefore been abandoned by a great many surgeons, but there are some cases where health cannot be restored in any other way. The following case will illustrate this: The patient, a girl 24 years of age, had been healthy to her 11th year, when she had an exanthem of the

lower extremities, which returned every winter to her 15th year, and then, with beginning menstruation, disappeared. But intense pains set in with every menstruation, and when 17 years of age, she was taken very sick, so that she had to keep in bed, which she only left after the operation had been performed, *i. e.*, after seven years. There was first vomiting, with pains in the stomach, and all food was rejected immediately. An ulcus ventriculi was then diagnosticated, but after a while these symptoms diminished, and she could take milk and eggs. Soon muscular contraction in the left lower extremity appeared; the upper part of the limb was in extension and abduction while the foot was in plantar flexion. These contractions extended slowly upward; they attacked the left upper extremity and the muscles of the jaw, and the musc. orbic. palpebr. They attacked gradually the other parts of the body, and the latter was then in a continuous state of contraction. Besides that, there was an intense hyperæsthesia of the skin, resulting in clonic convulsions, with loud cries at the least touch. In palpating the ovarian region, the patient closed the eyes, and a gurgling sound was heard in the larynx. The voice was lost entirely, and the patient had to be fed through a small aperture in a defective tooth. By pressure on the ovarian region the symptoms relaxed somewhat, and in a room with dense tobacco smoke the patient felt quite comfortable. This case was similar to that published by Charcot. The patient had to be carried to the hospital in a chloroformed state, on account of the extreme sensibility of the skin. The operation was performed in the usual way, the right ovary being dislocated into the sac of Douglas. Twelve days after the operation, the girl left the bed for the first time for the last seven years, and three weeks afterward she was entirely cured, the symptoms having gradually ceased in the same way as they had come on.—*Memorabilien.*

BLOODY TEARS.

A young hysteric girl complained that she lost a good deal of blood from her eyes every night, and observation proved this to be true. The examination of the eyes showed nothing more than a slight blepharospasm, with facial neuralgia. This is a rare

accident, but in the cases of Hasner and Brun the patients discharged a fluid from the conjunctiva which, under the microscope, showed the characteristic blood-corpuscles. The conjunctiva was in all these cases of healthy appearance, and there was neither tumor, nor any other disease of this organ. The accident occurs only in hysterical girls, and mostly at the time of the menstruation.—*Journal de méd. et chir. pratiques.*

NEPHRECTOMY.

The patient, a woman, 21 years of age, suffered from a renal tumor of the size of a man's head. The urine was purulent and there were intense pains. The diagnosis was pyelo-nephritic abscess, originating probably from a calculus in the kidney. Nephrotomy, *i. e.*, a large incision into the parenchyma of the kidney, was first practised, and a large quantity of pus escaped, the patient recovering quickly. But after six months, a fistula having been established, the pains reappeared with the same intensity, and nephrectomy was now decided on. It was tried to separate the cellulo-fatty layer from the kidney, but intimate adhesions prevented this performance. Then the fibrous capsule was incised and the enucleation thus easily performed. The patient had salivation to the amount of a liter every day on the thirteenth and fourteenth days, which was probably produced by a lesion of the pancreas during the operation. After three weeks the patient was discharged as cured.—*Le Praticien.*

A SINGULAR PHENOMENON OF CIRCULATION IN THE CORNEA.

A girl, 17 years of age, complained of pain and a certain tension in the left eye. For the preceding fifteen days the eyesight was entirely lost, but only when the head was kept in a declined position for awhile (sewing, etc.). By friction vision was restored in about two or three minutes. All the organs were found to be in normal condition, there being but slight anæmia and some disturbance in menstruation. The examination of the eye showed normal vision, with but little protrusion. The vessels of the conjunctiva were larger than normally, and on the lower margin of the cornea there was a ring of whitish-yellow color. Lowering the head for some minutes, there was seen a whitish-yellow substance

which entered the lower and middle part of the cornea, consisting partially of striated and partially of conglomerated fluid. The experiment could be repeated *ad libitum*, and with the head reclining the fluid could be seen to flow back into the ring. The white veil obstructing thus the eyesight consisted of lymph corpuscles which entered the cornea in a different manner. The girl was treated with iron, etc., and sent to the country, where the menses becoming normal, the phenomenon disappeared entirely.—*Annali di Othalmologia.*

CHRONIC TUBERCULOSIS OF THE CHOROIDEA.

A young boy of 17 suffered first from a swelling of the right knee and of the carpo-metatarsal joint of the left thumb. Three months later, vision of the right eye became imperfect and he had fainting spells. After one of these the right eye was found to be entirely blind. Two months later a tumor developed in the inner part of the right eye, and it reached the size of 16 mm. vertical and 18 mm. horizontal diameter, extending to the cornea. It was elastic and painful, and had a rough surface, no connection existed with the anterior chamber. Later the tumor opened, and the eye was then enucleated. Cornea, iris, and lens healthy, retina well preserved. The tumor is in the choroidea, and of a conglobate tuberculous character, with round and giant cells. Inoculation of rabbits proved the true tuberculous character of the tumor, but there were no bacilli found.—*Correspondenz-Blatt f. Schweizer Ærzte.*

GLYCERINE IN FEVERS.

Glycerine is in a certain sense a nutriment, and while it can be given in large doses with small parts of beef-tea and milk it will give the patients the power to resist the attacks of the fever. The best method to give it is with citric acid, the taste being then a very agreeable one. The examination of the urine after the use of glycerine shows a considerable decrease of urea. If the glycerine is not given for a certain time, the amount of urea increases again. 30 parts to 150 water can be given, tablespoonful every hour.—*Revista clinica e therapeutica.*

A CASE OF IDIOPATHIC MILIARY TUBERCULOSIS OF THE SPLEEN.

It is generally accepted that miliary tuberculosis of the spleen is a secondary disease originating from the tuberculosis of other organs, and especially from the lungs. The following case will contradict this theory: A prisoner, 25 years of age, had suddenly an attack of fever, with rising and falling temperature, intense headache, and cough with expectoration of mucus. In auscultation murmurs were heard all over the lower part of both lungs; the diameter and position of the heart normal, also its action. The abdomen somewhat tympanitic, liver normal, spleen greatly enlarged. The headache and cough increased, the face became cyanotic, there was hæmorrhage from the nose, diarrhœa, and retention of urine. After a few days delirium set in, and the patient tried to escape. The patient died after 17 days. The autopsy showed the lungs to be in a perfectly healthy condition, as were the heart, the stomach, and the intestines. The spleen, about three times larger than its regular size, contained in the capsule and the interior part numerous miliary tubercles adjoining the vessels.—*Aerztl. Intel. Blatt.*

POISONING BY CHLORIDE OF POTASSIUM.

It is not generally known, even among physicians, that chloride of potassium in large doses has strong poisonous properties. Dr. Friedlænder has made ten autopsies in the last three years where death was caused by the use of the chloride. The following two cases are lately reported: A child, four years of age, on the recovery from scarlatina and dropsy, was given a solution of two drachms of the chloride in three ounces of water and one ounce of syrup, every two hours a teaspoonful. After taking about half of the mixture vomiting with diarrhœa set in suddenly, and cyanosis and death followed shortly afterwards. The autopsy showed all the symptoms of poisoning by the chloride in the very emaciated child. A strong man, 49 years of age, was advised to dissolve a teaspoonful of the chloride in a glass of water, and to take of this solution a tablespoonful every two hours. By a misunderstanding upon his part, he took every two hours the whole mixture, containing one teaspoonful of the salt, and he

swallowed thus 50 grams in 36 hours. He died on the third day, and the autopsy proved the cause to be poisoning by the chloride of potassium. (Two distinct cases of poisoning by the chloride occurred in my practice 9 years ago, the druggist taking in each case the same amount of grammes as were prescribed for in grains. Tr.)—*Med. Chir. Centralblatt.*

Influence of Diphtheria on Pregnancy.

Although numerous works treat fully the subject of diphtheria, no allusion is made to its influence on the products of conception. Dr. A. Ollivier has had occasion to observe in the Hôpital Saint Louis a case of abortion in a woman four months pregnant, following a diphtheritic angina. The diagnosis and progress of the case was: Diphtheritic angina; extension of the pseudo-membranes to the nasal fossæ, to larynx, to trachea, and to the bronchial tubes; abortion; paralysis of the soft palate; imminent asphyxia; death. The disease was grave, not only in its nature, but also in the fact of pregnancy and the puerperal state following the abortion. How was, in this case, the abortion produced? What was the mechanism? At first we can explain it by the intensity of the fever. The influence of the febrile state on the course of pregnancy is not to be doubted; it has been demonstrated clinically and experimentally by Kaminsky. According to him, the high and prolonged elevation of temperature is one of the frequent causes of death of the product of conception in the infectious diseases. A temperature of 42°, 42.5° C. in the human being, of 41.5° C. in the rabbit, is absolutely deadly to the fœtus, and in women the danger of death of the infant commences at 40° C., and increases proportionately with the temperature. But our patient never had an intense fever; for, on the same day as the abortion the thermometer only marked 38.04° C. Therefore the temperature was not the cause of the abortion. On the contrary, the author finds the cause in the state of the maternal blood, either insufficiently oxygenized and saturated with carbonic acid, or altered by an infectious germ. In other words, the abortion was due to asphyxia in the first hypothesis, to a true intoxication in the second. The product of conception, once dead, is

nothing but a foreign body for the womb, and therefore expelled. Now, which one of the two causes had more influence on the abortion? This occurred in the night of the sixth or seventh day after the commencement of the disease. On the fourth day the respiration was easy; on the fifth became labored; on the sixth the cyanosis appeared at the lips and at the extremities. Therefore it must be admitted that the asphyxia played a certain role; this role was not predominant, and the author believes that in this case we must recognize the cause in the diphtheritic poisoning; that this poisoning was primitive or consecutive to the local infection.

The nature of the infectious and specific agent of diphtheria is yet unknown. Is this agent parasitic or not? The partisans of the former opinion are the most numerous. It is known that in diphtheria the blood undergoes notable changes. Its respiratory capacity considerably diminishes. And it has been shown by Hueter and Tommasi, by Letzerich, by Oertel, etc., that the diphtheritic false membranes, the lymph, the blood, and the kidneys themselves, abound with vegetable organisms, by some considered as the infectious agent, and by others simply as accidental elements. Until lately, the negative experiments of Brauell, of Davaine, of Bollinger, on the blood of embryos of different animal beings, seemed to have demonstrated that in the splenic fever the bacteria could not pass from the mother to the embryo. But at present this opinion is recognized to be false. Strauss and Chamberlain have experimentally proven that the bacteria of splenic fever can pass through the villi of the placenta and infect the fœtus. Cannot the same happen in diphtheria? The blood of the fœtus may become infected by the bacteria of the maternal blood. Concluding: diphtheria can in pregnant women be the cause of abortion, and acquire by it a greater gravity. The abortion will be due, in a great number of these cases, neither to asphyxia nor to the elevation of the temperature of the blood, but to an alteration of this fluid, which is incontestable. The possibility of an abortion, with its dangers, command us in the future to take all measures of precaution and of isolation whenever pregnant women are living in the same halls containing patients affected with diphtheria. It is particularly

on this point that Ollivier desires to call the attention of his colleagues.—*Archives Générales de Médecine.*

HOANG-NAN AND ITS THERAPEUTICAL INDICATIONS.

In 1879, M. Lesserteur, a missionary in Tonquin, and Director of the Seminary of Foreign Missions, published an account of hoàng-nan, a Tonquinian remedy for hydrophobia, for lepra, and other affections, and with the aim of making known this new remedy, he experimented. In 1881, Dr. Barthèlemy published simultaneously in the *Journal de Médic. de l'Ouest* and in the *Bull. Gén. de Thérap.*, a complete study of hoàng-nan, and the results obtained in the treatment of several affections of the nervous system, and of a case of varicose ulcer declared incurable. In 1883, the same author published in the *Bull. Gén. de Thérap.* a new study, eulogizing the hoàng-nan, especially as a specific for hydrophobia, giving at the same time the history of a case. In his paper he divided into three groups the diseases in which the Tonquin bark ought to be again experimented with: Diseases of the nervous system; poisoning by virus and venoms; local and constitutional cutaneous affections. The action of the remedy in the last group is probably due to its activity on the cerebro-spinal system. Brucine and strychnine, which enter into the constitution of this bark, are well-known stimulants of the nervous system, and, on the contrary, all the grave accidents due to an absorption of a virus or venom, depress profoundly this apparatus. Not long ago, Pasteur communicated to the Academy of Medicine that the cerebro-spinal axis is the principal seat of elaboration of the rabid virus. Could it not be the same with the venom of serpents? In four cases observed by Barthèlemy, Viaud-Grand-Marais and Albert Malherbe, the hoàng-nan was employed in the prodromic period, and the result was most brilliant; no rabid accident whatever was observed. The want of success is mainly due to the late use of the remedy *in extremis*, and to the insufficient doses. Barthèlemy recommends the hoàng-nan to be given in increasing doses, and especially during the period of incubation, and large doses in the confirmed cases of hydrophobia. One of the first results is to quieten the *moralè* of the patient and to gain his confidence. Another consequence

of the employment of the remedy is to permit us to diagnosticate to a certain point if we have to deal with a confirmed case of rabies. The cures obtained of patients bitten by the cobra di capello and by the black viper, are one of the reasons that brought us to think that, equally with the virus of hydrophobia, the venom of serpents might have the cerebro-spinal axis as the principal seat of elaboration. Another group of diseases amenable to treatment by hoàng-nan, is that of certain local or constitutional cutaneous affections, syphilis excepted; it seems that the Tonquinian bark has no effect on this virus. It was used in a case of eczema of the scrotum, invading the perinæum and the superior and external part of the thigh, and of ten years' standing; it was cured in a few days. Are not these cases, and many others analogous reported by exotic experimenters, sufficient to excite us to thoroughly study the hoàng-nan and its therapeutic properties?

CYSTICERCUS IN THE VITREOUS HUMOR.

Mlle. X., aged twenty-three years, consulted Prof. Dor on the 24th of September. Before last June, she possessed a good sight. On the 2d of June, she noticed a little cloudiness before the right eye, but not enough to prevent her seeing the minutest objects. From the 10th to the 12th of the same month the sight of the right eye seemed to diminish, and she commenced to see *muscæ volitantes*. But her ailment was attributed to nervous troubles. In the month of July, she saw a round, black macula, and by closing the eyelids she could perceive a constant, fixed, and brilliant point. In the month of August, the black macula had become translucent from the center to the periphery. Finally, the sight becoming more and more feeble, she consulted Prof. Dor. He found a detachment of the retina, and a round, whitish, translucent body adherent to the infero-internal part of the retina, having the aspect of a displaced cataract, which he recognized as a cysticercus. Having chloroformed the patient, Prof. Dor made a vertical incision, 8 millm. long, and was enabled after four or five attempts, to withdraw the cysticercus. It is to be noted that after the incision, and during the operation, no vitreous humor escaped. The hæmmorrage was insignificant. Atropine was applied daily. On the 12th, the patient was dis-

charged cured, although with an almost complete detachment of the retina. The entozoa was found to be the cysticercus cellulos.æ These cases are rare. This is the only case that the Professor has seen in 14,000 patients treated by him. Prof. Gayet has found one case of subconjunctival cysticercus in 9,000 patients. Profs. Hasse and Eberth, of Zurich, have never found it. It is very rare in Switzerland, and relatively frequent in Germany. —*Lyon Médical.*

Sugar as an Antiseptic.

Dr. T. Fischer announces in the *Centralbatt für Chirurgie* that since last May he has used in the surgical clinic of Strasburg, cane sugar as an antiseptic. It can be used, mixed with naphthaline, equal parts, or with iodoform in the proportion of 1 to 5. The mixture is placed on the dressing over the wounds properly closed with sutures; where the epidermis is wanting the sugar is applied directly. During the operation the wound is to be disinfected by a solution of sublimate, 1 to 1000. The treatment with the sugar can be left in place, 8 to 15 days without the sugar be dissolved. The wounds treated with sugar presented a good aspect, the bandages did not hurt, and no bacteria could be detected. The granulations rapidly developed, no propensity to hæmorrhage, and cicatrization formed with rapidity. In the sutured wounds healing always occurred *per primam intentionem.* The author has studied the following questions: Is the sugar decomposed? What are the formed products? Dr. Fischer believes, by his results, that the sugar dressing is to be recommended, and he advises its use as to be able to fix its proper value.

Alteration of the Inferior Vena Cava in Hepatic Cirrhosis.

Frequently it is noticed in some patients suffering with hepatic cirrhosis that the œdema of the inferior limbs precedes the development of the ascites instead of being consecutive to it, as is taught by classical works on the practice of medicine. Professor Giovanni finds the explanation of this anomaly in the alterations of the vena cava, which frequently, according to him, are the

result of cirrhosis of the liver. Numerous autopsies have enabled him to recognize that this disease is complicated very frequently by hyperæmia of the walls of the inferior vena cava, by phlebitis and varicose dilatations, all which lesions have never so far been demonstrated before Dr. Giovanni, and naturally sufficient to produce disorders in the circulation of the inferior limbs to explain the œdema.—*Gazzetta degli Ospidali di Milano*, 1883.

TREATMENT OF POLYPI OF THE EAR WITH ALCOHOL.

Dr. Politzer states that he has obtained good results by dropping alcohol several times a day into ears affected with polypi. The alcohol ought to be applied at least three or four times a day without interruption. After continuing it fifteen days to two months the polypus commences to contract, and gradually diminishes in size to a complete disappearance. The treatment was equally successful in fibrous polypus. During the first days the patients felt an excessive pain, and later an increase of heat in the affected part.—*Wiener Med. Blatt.*—*Revue Médicale.*

BERIBERI.

Dr. Scheube has described the four following symptomatological groups relating to beriberi: First, sensitive or motor paralysis, frequently in the paraplegic form, with muscular atrophy; second, affections of the heart with predominance of asthenia; third, dropsical affections; fourth, diminution of renal activity. The author considers this disease as a specific neuritis following a subacute course. Dr. Wervic, on the contrary, considers it as caused by an alteration of the blood, a sort of anæmia.—*Deut. Arc. Klin. Med.*—*Revue Médicale.*

THERE is living in Montijo a woman with four mammary glands; two are situated in their ordinary place, and the other two, a little smaller, perpendicularly and two centm. above, one on each side, with their corresponding nipple. She is at present nursing a child with the four breasts, all having an abundance of milk.—*Il Siglo.*

THE TREATMENT OF CHRONIC URETHRITIS AND BLENORRHAGIC CYSTITIS.

If the patient is scrofulous or tuberculous he ought to be treated accordingly with arsenic, iodine, or cod liver oil, and at the same time small doses of the bals. copaiv. have to be administered. The local treatment consists of injections, and instillations, cauterization or catheterism. Injections are often useless in chronic urethritis, the seat of the inflammation being in the cul-de-sac of the urethra, where the injections cannot enter. The new syringe of Guyon, where the injected fluid flows back by a second apertureor tube, is doubtless accompanied by good results when the inflammation is in the anterior part of the urethra. Instillation is followed by very fair results in chronic urethritis. The instrument used for this purpose is an explorator of hard rubber, with a fine aperture at its point. To this is attached akind of Pravaz syringe tightly fitting and exactly graded. If an instillation into the posterior part has to be made, the sound is introduced into the latter, and after the first resistance has been overcome (the bulbar part) it is thrown into the cul-de-sac, where there is complete resistance. It is then thrown back a little, and twenty drops of a strong solution of the nitr. of silver injected. The instrument is kept *in situ* for three or four minutes. The treatment has to be continued for fifteen to twenty days. The application of bougies or catheters is often followed by damaging results.—*Journal de Méd. et Chirurg. Pratiques.*

MISCELLANEOUS.

IN some parts of France the following curious customs are in vogue up to to-day: When a woman is parturient her corset is hung on the bell of the church and the latter rung three times. If the after-birth does not come, the woman's head is covered with the husband's cap turned inside out, and then she must blow in a big bottle. The father of the new-born child must report the birth in the court-house. When a boy is born, he wears a stiff hat, but if it is a girl he appears in a lady's bonnet.

CREMATION is officially advocated in Portugal. In cases where there is a will made that a person is to be buried in the ground, the body is exhumed after five years and then cremated.

A DOCTOR, with an Arabo-Hindostanian name settled in one of the suburbs of Paris. In a short time he had a large run of wealthy patients. The police sent an officer to inquire about the diploma of the mysterious practitioner. The doctor received the officer very politely, and smilingly showed him his full certificates and diploma from the University of Paris. "But," he said to the officer, "you will oblige me if you do not speak about this affair, for I would lose all my patients in a short time, if they should know that I am a regular Parisian physician."

THE members of the school of Catholic medicine (!) at Lille, France, have opened a subscription for the erection of a chapel in the Basilika of Montmartre, where they will pray "for the souls of those *confrères* who went astray from the right path of Catholic medicine and religion, and who, being atheists and politicians, are damned forever to infernal depths." As the chapel will cost 50,000 francs, and as there is but little money at present, it is doubtful if the "political confrères" will have the chance to be prayed for.

A CASE of rather extravagant character came before the Superior Court of Bordeaux, France. A regular physician, but one who had largely advertised a "sure cure" for sterility, was engaged by a lady, and he performed his operation (artificial impregnation). There was no result, and the lady refused to pay the price of 1,500 francs. The doctor brought suit against the lady and her husband, but the court decided that the operation was not a regular one, and the doctor had to pay the costs.

A CASE of congenital ectopia of the heart came before the Paris Academy of Medicine. The woman had a bifid sternum, and the diaphragma was divided in its anterior part, so that the heart could be felt pulsating through the thin walls of the chest-

covering, which was pigmented. The ventricles are small, and the axis vertically directed, so that the whole hangs down to the abdomen. There was also a small umbilical hernia.

SALICYLATE of zinc is, according to the *Independencia Medica* of Barcelona, an excellent remedy in cases of ulcerative cancers, the properties of antiseptic and astringent action being combined in this remedy.

DO THE CONTRACTIONS OF THE UTERUS DEPEND UPON THE CEREBRO-SPINAL SYSTEM?

It has been known for a long time that women with total paralysis of the bladder and rectum, had normal labor-pains and regular deliveries. Dembo, in St. Petersburg, has made experiments on the connection of the cerebro-spinal and uterine nervous systems, and he aims to prove (1) that there are points in or around the uterus which, when irritated by the electric current, provoke normal contractions of this organ; (2) that these contractions will also be produced after the uterus has been disconnected with the cerebro-spinal system, the animals, mostly rabbits, having been either curarized or chloroformed. The author, after giving details of his experiments, says further: (1) There are regions in the anterior vaginal wall which, by the electric current, will provoke contractions of the uterus; (2) the same contractions are produced by the galvanic currents; (3) these contractions can be provoked several hours after the death of the animal; (4) the uterus of young animals is more liable to contract than that of older ones; (5) the two nervous systems of the uterus of rabbits are independent from each other; (6) in pregnant animals the irritability is diminished; (7) the uterus of very young rabbits is also liable to be contracted; (8) curare diminishes the contractibility. Dembo thinks, therefore, that the uterus is entirely independent of the cerebro-spinal system, and that it has special nerve-centers. (The uterus of the rabbit cannot be compared with the uterus of the human female, the former being the most important organ of this animal).—*Comptes Rendus de la Société de Biologie.*

ECHINOCOCCUS ALVEOLARIS OF THE LIVER.

The patient, 29 years of age, has had icterus four or five times, once dropsy, and five years ago intermittent fever. At the present time the skin is intensely icteric; lungs and heart healthy; liver greatly enlarged and sensitive, its surface full of nodules; the spleen also enlarged; the abdomen is tympanitic; the urine shows a large amount of gall-products. The patient complained of pains in the abdomen, as if a stone were laying there; and there was also xanthopsy. The diagnosis was cirrhosis of the liver with icturus. The patient died after five days. The right lobe of the liver was enlarged, and of a greenish-brown color; on its inner surface there were small nodules of a hard consistence, which contain alveolared echinococci. The left lobe was adherent to the diaphram by connective tissue filaments, its capsule enlarged and rough on its surface. The tumor on the liver was of the size of a child's head, and of light color. It was as hard as bone, and its stroma filled with alveoles of the size of a pea, with irregular borders. The microscopical examination of the tumor showed that there was not a vestige of liver tissue proper, but there were numerous minute alveoles, which were inhabited by echinococcus sacs. The lamelar layer, consisting of chitine, was not adherent to the walls of the alveoles. In water, it was observed that one sac was often formed by two or more alveotes, which could be separated. On the other hand, there were often communications between two or more alveoles. On the margin of the tumor the number of alveoles decreased, and there were large filaments of connective tissue which looked like the acini of the liver. The contents of these filaments were often colored by a yellowish fluid, which was similar to that of the gall-bladder.—*Aerztl. Intelligenz-Blatt.*

ON COMBINED ŒSOPHAGOTOMY.

For impermeable strictures of the œsophagus, gastrotomy has been hitherto the only relief. Gussenbauer has lately performed the above-named operation on two persons, and in both cases he restored the function of the œsophagus. The first case was a stricture caused by swallowing sulphuric acid, and it extended from the level of the ring cartilage to the upper chest part of the œsophagus, at about the bifurcation of the trachea.

He made first external œsophagotomy (Guattani). While the whole mucous membrane was deformed by scars, and dilatation had been practised without success, he introduced a small pointed sound of 1 mm. diameter through the stricture, over which was pushed another hollow sound. Withdrawing the pointed sound, he cut with a herniotome to the right and left, no hæmorrhage following. Instantly he could introduce a No. 8 catheter, by which a fluid was injected into the stomach. The patient was nourished by a stomach sound of the largest caliber. The wound of the throat healed quickly. The second case was that of a child two weeks old who had been given carbolic acid. The external incision was made a little lower than usual, and a sound of $\frac{1}{3}$ mm. diameter was introduced; afterward the hollow sound, and the operation made as above. A No. 12 catheter could be immediately applied. The wound healed in 35 days. The child, nearly starved to death before the operation, is now in a flourishing condition, and the father inserts a bougie but once a week. —*St. Petersburg Med. Wochenschrift.*

REFLEX DILATATION OF THE PUPILS A SYMPTOM OF SOME AFFECTIONS OF THE BRAIN AND MENINGES. Translated by P. E. ARCHIBALD, M.D., *Gazette des Hôpitaux.*

Professor Parrot shortly before his death made the following discovery, referred to by Dr. Landouzy in his lectures on general tuberculosis. In young children affected with certain diseases of the brain and its coverings, giving rise to coma with or without convulsions, and accompanied by pupillary contraction, stimulation, as by pinching, of the skin of the epigastrium during the stage of coma, produces a more or less marked dilatation of the pupils. In other cases, also characterized by coma but without convulsions, no amount of cutaneous excitation can induce this phenomenon.

The diseases in which this sign is present are marked by normal or increased cutaneous excitability; they are the following, demonstrated by a number of examinations made on the cadaver: tubercular meningitis, hemorrhages underneath the pia-mater, some cases of chronic hydrocephalus and a few cases in which no

appreciable anatomical lesions were found. All this group is characterized by compression of the cranial contents.

The cases In which this dilatation is absent present cutaneous anæsthesia and a non-compression of the encephalon, as evidenced by depression of the fontanelles. The most important of these are: œdema of the pia-mater, congestion of the nervous mass, and of the meninges.

Now, physiologists assign two sets of causes for the motion of the iris. The first purely nervous: contraction of the pupils due to the circular fibres of the irides supplied by the 3d pair of nerves, dilatation caused by the radiating fibres of these muscles controlled by the sympathetic. The second cause is vascular; an increase of blood to the irides giving rise to contraction and a diminution to dilatation of the pupils. Professor Parrot thought the phenomenon observed by him must be due to vascular action, and explained it in this way: the stimulus produced by pinching the skin is transmitted by the afferent nerves to the centres in the medulla and thence reflected to the vaso-constrictor of the irides, thus causing a diminution in the calibre of the vessels of these muscles, a diminished supply of blood, and hence pupillary dilatations. The only practical deductions from the above so far are: that children affected with coma with or without convulsions, in which the pupils do not dilate on repeated cutaneous stimulation, do not suffer from tubercular meningitis nor from hemorrhage of the pia-mater.—*New Orleans Medical and Surgical Journal.*

FOREIGN BODY IN THE UTERUS.

Dr. E. Hjertstrom published in the *Hygiea* a curious case of a woman, aged 49, subject since puberty to periodical attacks of mania, with lucid intervals. She was admitted to hospital on account of an abundant and fœtid vaginal discharge. Examination of the uterus showed the neck covered with granulations, and irritated by a secretion coming from the uterine cavity. The exploration of the cavity revealed within it a metallic body. Extraction being indicated, after the dilation of the cervix, the doctor removed a piece of metal lodged in the superior part of the uterine cavity. This metallic body proved to be the brass socket

of a candlestick, measuring 0 m .015 in length and 2 centim. in diameter and 4 centim. of diameter at the rim. The patient could not state how the socket entered her womb; menstruation had ceased five years ago, and the last labor dated back twelve years. She did not remember having any symptoms of parametritis; she had had some uterine pains. At what time did this body enter the uterus? After the last parturition, before the womb had contracted! That is not very probable. We rather think that the piece detached itself from a candlestick introduced in the vagina, and that it was seized and retained while the uterus was contracting during its mechanical excitations.

PROPERTIES OF ADONIS VERNALIS.

This plant has been for a long time, in the south of Russia, a popular remedy for dropsy, but has not been yet submitted to scientific researches in order to determine its physiological and therapeutical action. Professor Botkin has largely experimented with it in his clinic at St. Petersburg, and Dr. Bubnoff has published a report of the results obtained (*Allgemeine Med. Central Zeitung*). This remedy has no effect in any dropsies except those caused by a cardiac affection. After the administration of the adonis vernalis the beats of the heart become more distinct, the volume of the organ diminishes, and the sounds are more audible. The systolic souffle of the aortic insufficiency especially becomes more intense. The rhythm of the heart is more regular, the pulse slower and more forcible. The urine excreted in the 24 hours notably increases from 300 or 350 grams to 550 or 600. In case there is no alteration of the kidneys, the albumen and the epithelial tubules disappear. The œdema disappears in proportion as the urine increases. The remedy is given in infusion in the dose of 4 grams in 180 grams of water, flavored by two drops of oil of peppermint. A tablespoonful of this infusion may be given every two hours.—*La France Médicale.*

SPINAL MENINGOCELE WITH SPONTANEOUS RUPTURE AND RECOVERY.

A child ten years old has a tumor of the size of an apple on the lumbo-sacral region, the origin being dated back to its birth. The tumor has been tapped by several physicians, but it

always rapidly refilled. The actual state is as follows: The tumor is soft, the covering skin not being colored and it is provided with a small pedicle. Its volume is changed by a rapid diminution in case the patient lays on its abdomen, and is increased again in the vertical position and in defecation. It is transparent as a hydrocele. In touching it, no heat can be perceived and palpation causes no pain. It is fluctuating and reducible and by taxis a part of the fluid re-enters the spinal canal. The latter procedure is accompanied by cerebral phenomena, the child complaining of dizziness in the head and somnolence. On the bases of the tumor, or rather at the level of its pedicle there is a depression in the form of a fold by which the fluid escapes. It is, of course, congenital and a meningocele containing only cephalo-rachidian fluid. These tumors are very dangerous on account of causing instant death. A fine trochar was introduced; 250 grm. of a clear fluid withdrawn, and a tight corset applied. A week after, the same puncture was renewed, and this operation several times repeated, but the tumor grew apparently larger than before, and attained the size of a child's head. There was now mortification of the skin and a scab formed which fell off and the tumor burst. The child was laid on its abdomen for 28 days, a large amount of fluid escaping every day. After three months there was but a small fistula, and after six months the fistula was closed by thickened epithelium. The aspect of the former tumor is that of a patch of thickened skin without any opening, and the child is entirely healthy.—*Archives Générales de Médecine.*

CEREBRAL SYPHILIS.

Is either characterized as gummous phagedena or an arteritis. The first is caused by a nocturnal headache followed by partial convulsions and coma or cerebral paralysis, especially of the third pair, an incomplete hemiplegia and paretic troubles. The syphilitic arteritis is mostly limited to the sylvian arteries at their bifurcation and to the basilar trunk. The vessels are slightly enlarged, which is due to yellowish nodules found in the walls of the artery. It is mostly accompanied by vertigo, cephalalgia, end pupillary dilatation.—*France Médicale.*

LARYNGITIS HYPOGLOTTICA HYPERTROPHIA, TREATED WITH TUBES.

Schroetter first recommended the use of tubes in cases of certain affections of the larynx, but the reported results seemed not to have been satisfactory. The following case will show the importance of the application of tubes in certain conditions. The patient, a women 35 years of age, had always been healthy, menstruated at 16, and married at 20 years of age. In fourteen years of married life she had seven children. Eight years ago she noticed a hoarseness, which temporarily disappeared to reappear again. In the last year the symptoms became grave, breathing being difficult, and the voice disappearing entirely. At last asphyxtic symptoms made it necessary to bring the patient into the hospital. The face is cyanotic; stertorous breathing audible at a long distance; voice soundless; larynx and trachea powerless in palpation, and neither enlargement nor dislocation visible; lungs healthy, as is also the stomach. The laryngoscopic examination shows anæmia of the soft palate, of the epiglottis, and of the entrance of the larynx. In phonation the slightly red-colored vocal cords do not join each other, but they seem to be agglutinated to a swelling, which fills up the internal larynx so that there is but a small opening on the angle of the glottis, and not larger than a pencil. The whole swelling appeared white without vascularization. The free margin is uneven and especially on the left side, it seems to be ulcerated. In inspiration the vocal chords move and the swelling is seen to be subchordal. The diagnosis is laryngitis hypoglottica hypertrophia, the absence of any pain excluding cancer. There was no symptom of tuberculosis. Catheter No. 10 was introduced the first day, and kept in situ for four minutes. In the following night the patient complained of dyspnœa. Four days afterwards catheter No. 11 was easily introduced and kept in situ for five minutes. The next week catheter No. 12 was applied. Now the laryngoscopic examination showed a different picture. The swelling adjoining the laryngeal-mucous membrane had disappeared, and on the left side there were seen granulations. Later, Schrœtter tube No. 1 was introduced, and then after a short time tube No. 3 and 5 constantly applied. In the meantime the woman had learned to

apply the tubes herself, and she did it with such exactness that the complete cure was left to herself. Two months after the beginning of the treatment inspiration and aspiration are normal and the voice hoarse only a few hours after introduction of the tube. The swelling is nearly gone and the vocal cords move freely.—*St. Petersburg Medical Wochenscript.*

THE PATHOLOGY OF OPHTHALMIA JEQUIRITICA. Translated by C. R. EGGEMANN, M.D., Detroit, Mich.

Prof. Sattler in *Zehender's Klinische Monatsblaetter fuer Augenheilkunde* says: Between the application and the first appearance of subjective or objective symptoms, there is a period of incubation of about three hours, increasing slowly at first then very rapidly so as to produce a violent ophthalmia within sixteen hours. The lids are agglutinated, œdematous, so as to be even or project above the orbital edge, glistening, hot, and very painful on touching. The palpebral conjunctiva is covered with a thick, tenacious, grayish-yellow membrane. The retrotarsal folds and the ocular conjunctiva are œdematous, the former dark-red in color covered with a fine grayish-yellow membrane, the latter red, slightly tinged with yellow, and surrounding the cornea like a wall. The patients are uneasy, complain considerably, and the temperature is elevated. Occasionally there is swelling of the præ-auricular gland accompanied with a severe coryza. Twelve to sixteen hours after an application of one per cent. infusion the inflammatory process reaches its height, and continues for a day. The membranous exudation could be removed with ease from the palpebræ. The secretion is profuse and purulent. On the fifth or sixth day, the formation of this membranous exudation ceases, only at the retro-tarsal folds it adheres for a few days longer, leaving in some cases a slight cicatrix. It takes weeks before the conjunctiva has regained its normal appearance, and the last symptoms of redness, unevenness, and the dirty yellowish discoloration have disappeared. In some cases there were superficial opacities and shedding of the corneal epithelium. These are the symptoms of ophthalmia jequiritica produced by a single application of an active infusion on the normal conjunctiva of man. By an active infusion is meant the maceration of the pulverized

seed, after the shells have been removed, for twenty-four hours at an ordinary temperature, having the strength of one or five per cent., and to be used immediately after filtering. We can limit the intensity and duration of the ophthalmia by the number of applications made. Age diminishes the action of an infusion and in time it becomes inert. Maceration at high temperature destroys its action, while maceration in ice-water for twenty-four hours did not affect it at all. A few remarks on the experiments on rabbits: the lids were œdematous, felt hard as a board and in some cases the sloughing was partial or complete. The membranous exudations on the palpebral conjunctiva are denser and tougher and on the retro-tarsal folds have a diphtheritic appearance. After the disappearance of these symptoms we have symblepharon or entropion remaining. The cornea is always implicated if the ophthalmia attains any degree of severity. Diffuse opacities may remain, or the cornea may become completely necrosed. A number of the animals succumbed after the inflammation extended from the lower to the sternal region, which, on section, appeared to be a waxy infiltration. An animal that had undergone this process, and with considerable change in the conjunctival tissue, could not be inoculated again so readily, strong infusions exciting only a slight conjunctivitis. Albumen and coloring matter, sometimes other things, are taken for micrococcus; then Moura Brazil speaks of conidia (should be gonidia), mycelium, fibers, and spores, of which there is not the slightest trace to be found in the infusion. The same gross error is shown in the examination of the detached membranes. Prof. Sattler found a quantity of albuminous matter differing materially from that of the other leguminosa. Prof. Hilger obtained a crystalline substance from the seed soluble in slightly alkaline water, applied to the normal conjunctiva in the strength of one per cent., it was inert. A ferment was not found in the infusion. The microscopical examination by Prof. Sattler shows that a bacillus in enormous quantities is found in the infusion immediately or a few hours following filtration. The bacilli have a cylindrical, homogeneous, opaque form, and an oscillatory or rotary motion. The infusion is of a greenish-yellow color, as a rule had a turbid

appearance after being filtered, a peculiar, characteristic odor, becoming disagreeable in time. After standing a few weeks the infusion slowly clears up, and has an odor resembling fresh lime. If we test the infusion for albumen at this time, we find that it has completely disappeared.

The temperature has considerable influence on the formation of the bacilli. High degrees destroy them entirely, low degrees check them, but they continue to form on being brought into the ordinary temperature of a room; 34 to 36 degrees C. is the most favorable, bacilli beginning to appear after a maceration of twelve hours. On filtering the infusion and drying the sediment, the bacilli remain latent, but on moistening they become active. A submersion in a weak corrosive sublimate solution (O. I. P. M.) not to exceed two or three minutes does not destroy them. In this dry state they have withstood the temperature of 110 degrees C. for five minutes. The moistening and boiling for five minutes suffices to destroy their activity. In power of resistance these bacilli are far behind the bacilli obtained from an infusion of hay. In the discharge as well as in the membranous exudation the bacilli are met with, but not in large quantities. The secretion will produce an ophthalmia if brought into a normal eye, but the inflammatory symptoms are not so intense. The bacilli are more numerous in the infiltrated conjunctiva and in the fibrinous exudation of the subconjunctival tissue of the retrotarsal folds during the first stage of inflammation. To render the infusion innocuous, it was necessary to boil it for half an hour. After filtering and exposing the infusion to the air, the bacilli were poorly developed and ineffective. A solution of corrosive sublimate, 1 to 8,000, destroyed the germs. The reason for using it in this strength was on account of the albumen the infusion contained. Thymol, 1 to 2,000, was ineffective, 1 to 1,100 sufficed to render them innocuous. Iodoform added to the infusion during maceration, and after filtering, did not check the development of the bacilli, nor of the ophthalmia. The dusting of iodoform into the eye did not retard the progress of the ophthalmia. A diminution in the intensity of the ophthalmia was accomplished. The propagation of this bacillus upon serum, gelatine, etc., was successful, retaining its peculiar physiological

action when brought into contact with a normal conjunctiva.

The hypothesis which remains for us to accept, is, that there is a widely diffused and benign bacillus, the spores of which gaining access to an infusion of jequirity, develop and assimilate certain substances, acquiring a new physiological action, having the power of flourishing upon the conjunctiva of living animals and through the formation of a "ferment," produce certain reactions which we see in a well developed ophthalmia jequiritica. The action of ophthalmia jequiritica is similar to an acute blennorrhœa. The micrococcus that flourishes in and around the trachomatous bodies is suppressed by the more powerful bacilli of the jequirity infusion; it is, "the survival of the fittest." With extinction of the jequirity ophthalmia, there is an atrophy of the original inflammatory products.

170 RANDOLPH STREET.

THE following advertisement is in a German medical paper: A miss of somewhat more than 30 years of age, but with a good-looking face, desires a bachelor-physician for her surgery, with which is connected a farm and a dry-goods store. He will be goodly fed, and he will obtain a good salary, if not more.

THE *Boletin de Ciencias Medicas* of Mexico, reports good results from the internal application of iodoform in diabetes insipidus. The iodoform is given in the form of pills with the extract of the tonka bean and conmarine, half a grain of the iodoform at a dose.

FIFTY cents will be paid by one of our subscribers for a single copy of this journal of the issue of December, 1881, to be left at room 37, No. 240 Wabash avenue.

COL. ROBERT MURRAY, Assistant Surgeon-General, and senior surgeon of the service, has been appointed by the President, Surgeon-General of the Army.

THE Cincinnati Directory for 1883 gives 463 as the number of physicians in that city.

Selections.

DISADVANTAGES OF THE UPRIGHT POSITION. By S. V. CLEVENGER, M.D.

The immediate and remote causes of things have been and will be sought by thinkers who are not afraid to follow wherever facts lead them. The doctrine that there is no effect without an antecedent cause has met with fierce opposition from those who saw that the logical conclusions of correlated facts, such as are presented by Darwin, tended to the overthrow of puerile legends they believed in, and who were content to imagine that everything was causeless, or at least originated in some inscrutable way. The Arab, upon having the sidereal motions explained to him, said, "You trouble yourself greatly about things not intended for you to know. Even though what you tell me is true, the Koran leads us to believe otherwise. Mohammed taught us sufficient, and his followers can torture you out of your rationalism. Forbear your heretical facts!"

The mechanical nature of things inanimate, is as old in theory as Democritus, 500 B.C.; and Giordano Bruno, in A. D. 1600, for having amplified the Democritic idea, was burned at the stake. Kant granted a mechanical cosmogony, but in organic nature claimed *causæ finales*. The battle of *causæ efficientes* was fully won by Galileo, Copernicus, Kepler, Newton, Herschel, Laplace, etc., so far as the inanimate universe was concerned, but the mechanical conception of that which pertains to living things was hinted at by Aristotle. Geoffrey de St. Hilaire contended against Cuvier for the mutability of species and the monistic theory. Treviranus, Oken, Gœthe, Lamarck, and in our day, Darwin,

Hæckel, Huxley, have carried on the warfare. Herbert Spencer advanced a mechanical physiology and morphology. He has carried the conception into histology, and Cope into palæontology. The unity of the laws which control organic and inorganic nature are to-day fully recognized by those who stand in the front rank of investigators and thinkers, but not until completer text-books from the new standpoint shall have found their way into the hands of medical students and naturalists generally, will common recognition of the success of the mechanical idea be obtained.

Assuredly the teleological is a very lazy way of thinking. It amounts to taking things for granted as so, because they are so. It bars all inquiry, stops all investigation, and hands us bound hand and foot to ignorance and superstition.

Mechanical influences, such as impacts and strains, permanently altering animal organs, have been discussed by Professor E. D. Cope in the *American Naturalist*, in articles entitled "Origin of the Foot Structures of Ungulates," April, 1881; "Effects of Impacts and Strains on the Feet of Mammalia," July, 1881; by Alpheus Hyatt, "Transformations of Planorbis at Steinheim, with Remarks on the Effects of Gravity upon the Forms of Shells and Animals," June, 1882. In articles published in the January and February, 1881, numbers, I attempted a disquisition upon physical influences in their relations to comparative neurology, and in the July, 1881, Number of the *American Naturalist*, "On the Origin and Descent of the Human Brain," pointed out some hitherto neglected mechanical factors in the development of the organ of the mind and its osseous envelope.

While engaged in anatomical studies, the idea that there was a definite reason for everything, and that we might some day discover the reasons for many things not now known, was ever present to my mind. I could get half lights and glimpses of causes from hints in Henle, Holden, or Sharpey and Quain, and fancied I saw matters clearly enough in some particulars, only to be confused by contradictory experiences subsequently.

There seemed to be a definite enough law in the formation of valves in the veins, for instance, but every student was compelled

to learn the location of these valves by arbitrary exercise of the memory. I think every student will conclude at the end of this paper that it is easy enough *now* to remember which veins are valved, and which are not. Let me present the subject just as it perplexed me at first. Nothing could be simpler, from the teleological standpoint, than that we should have valves in the veins of the arms and legs to assist the return of blood to the heart against gravitation, but what earthly use has a man for valves in the intercostal veins, which carry blood almost horizontally backward to the azygos veins? When recumbent, these valves are an actual detriment to the free flow of blood. The inferior thyroid veins, which drop their blood into the innominate, are obstructed by valves at their junction. Two pairs of valves are situated in the external jugular, and another pair in the internal jugular, but in recognition of their uselessness they do not prevent regurgitation of blood nor liquids from passing upwards.

An apparent anomaly exists in the absence of valves from parts where they are most needed, such as in the venæ cavæ, spinal, iliac, hæmorrhoidal, and portal. The azygos veins have imperfect valves.

Place man upon "all fours," and the law governing the presence and absence of valves is at once apparent, applicable, so far as I have been able to ascertain, to all quadrupedal and quadrumanous animals: *Dorsal veins are valved; cephalic, ventral, and caudal veins have no valves.* The apparent exceptions to this rule, I think, can be disposed of by considering the jugular valves as obsolescing, rendered rudimentary in man by the erect head, which in the lemur stage depended. The rudimentary azygos valves may be a recent creation, and an explanation of their presence may be found in the mutability of the cardinal system. The single Eustachian valve, being large in the fœtus, has a phylogenetic value. In this connection I would call attention to my mention, in *Science* (New York), June 25, 1881, of the probable brachial origin of the thyroid and thymus glands. There are many reasons for believing these bodies to be ruidmentary gills.

The only reason I can assign for the absence of cephalic and cervical valves generally, while the jugulars possess them, is, that

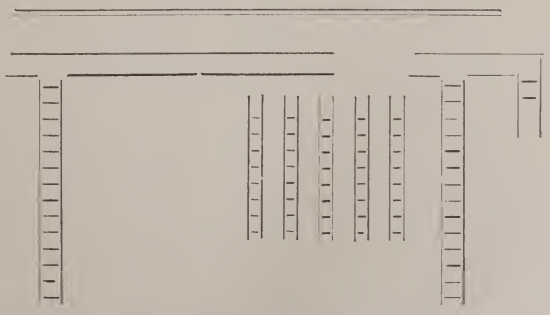
the jugular system was the most important to our quadrupedal ancestors with dependent heads, hence valves developed in them, and that owing to the cranial blood vessels developing, *pari passu*, with the cranium and its contents generally, largely after man had assumed the erect position, the valvular formation elsewhere in the head would not occur while the jugular valves became rudimentary.

a, refers to the spinal system; *b*, jugular and caval to femoral; *c*, brachial; *d*, intercostal.

Certainly valves in the hæmorrhoidal veins would be out of place in quadrupeds, but to their absence in man many a life has been and will be sacrificed, to say nothing of the discomfort and distress occasioned by the engorgement known as piles, which the presence of valves in these veins would obviate. The spermatic valves are as useful in man as in other animals.

A glance at the accompanying diagram will afford an idea of the confusing distribution of valved and unvalved veins in the human being.

The position assumed by these valved veins when man is placed on all fours, corresponds with those to be found in quadrupeds, thus:



A noticeable departure from the rule obtaining in the vascular system of mammalia also occurs in the exposed situation of the femoral artery in man. The arteries lie deeper than the veins, or

are otherwise protected for the purpose, the teleologist would say, of preventing hæmorrhage by superficial cuts. From the evolutionary standpoint it would appear that only animals with deeply-placed arteries would survive and transmit their peculiarities to their offspring, as the ordinary abrasions to which all animals are subject, not to mention their fierce onslaughts upon one another, would quickly kill off animals with superficially located arteries. But when man assumed the upright posture, the femoral artery, which was placed out of reach on the inner part of the thigh, became exposed, and were it not that this defect is nearly fully atoned for by his ability to protect the exposed artery in ways the brute could not, he too would have become extinct. Even as it is, this aberration is a fruitful cause of trouble and death.

Another disadvantage which occurs in the upright position of man is his greater liability to inguinal hernia. Quadrupeds have the main weight of abdominal viscera supported by ribs and strong pectoral and abdominal muscles. The weakest part of the latter group of muscles is in the region of Poupart's ligament, above the groin. Inguinal hernia is rare in other vertebrates because this weak part is relieved of the visceral stress, but as the pelvis receives the intestinal load in man, an immense number of tissues are manufactured to supplement this deficiency. It has been estimated that 20 per cent. of the human family suffer in this way, and strangulated hernia frequently occasions death.

If man has always been erect from creation, then we have nothing to hope from the future by way of an alteration of this defect. The same percentage of humanity will suffer to the end of time; but considered mechanically, the so-called conservative influence of nature, which will tend to pile up additional muscular tissue in this region by reason of the increased blood supply to that part, aided by natural and sexual selection, will eventually reduce the percentage of ruptures greatly, if it does not eventually correct the trouble altogether. The liability to femoral hernia is similarly increased by the upright position.

The peritoneal ligaments of the uterus subserve suspensorial functions in quadrupeds fully, which require much ingenious speculation to be faintly seen in man. The anterior, posterior and lateral ligaments are mainly concerned in preventing the gravid

uterus from pitching too far toward the diaphragm of four-footed animals. The round ligaments are absolutely meaningless in the human female, but in lower animals serve the same purpose as the other ligaments. Prolapsus uteri, by the erect position and absence of support fitted to that attitude, are thus rendered frequent, to the destruction of health and happiness of multitudes.

As a deduction from mechanical laws, it could easily be imagined that an animal or race of men which had the longest maintained the erect position would have straighter abdomens, widely flared pelvic brims with contracted pelvic outlets, and that the weight of the spinal column would carry the sacrum lower down, and in general terms we find this to be the case. In quadrupeds the box-shaped pelvis, which admits of easy parturition, prevails, but where the position of the animal is such as to throw the weight of the viscera into the pelvis, the brim necessarily widens, these weighty organs sink lower, and the heads of the femora, acting as fulcra, admit of the crest of the ilium being carried outward, while the lower part of the pelvis must be contracted. This box shape exists in the child's innominate bones, while its protruding abdomen resembles that of the gorilla. The gibbon exhibits this iliac expansion through the sitting posture, which developed his ischial callosities. Similarly, iliac expansion occurs in the chimpanzee. The megatherium had wide iliacal expansion, due to its semi-erect habits, but as its weight was mainly supported by the huge tail with femora resting in acetabula placed far forwards, the leverage necessary to contract the lower pelvis is absent. Professor Weber, of Bonn, noted by Carl Vogt, "Vorlesungen über den Menschen," etc., distinguished four chief forms of the pelvis in man ; the oval, round, square and cuneiform, owned in order by Europeans, native Americans, Mongols and black races. Resting upon its own merits as an osseous mechanical proposition, it would seem that the older the race the lower the sacrum, and the greater the tendency to approximate the larger transverse diameter of the European female. The antero-posterior diameter of the simian pelvis is usually greater than the transverse; a similar condition affords the cuneiform, from which could be inferred that the erect position in the negro races had not been so long maintained as by the Mongols, whose pelvis as-

sumed the quadrilateral shape owing to persistence of spinal axis weight through greater time; this pressure has finally culminated in pressing the sacrum of the European nearer the pubes, with consequent lateral expansion at the expense of the antero-posterior or conjugate. From marsupialia to lemuridæ the box shaped pelvis persists, but with the wedge shape induced in man a remarkable phenomenon also occurs in the increased size of the fœtal head, in disproportion to the contraction of the pelvic outlet. While the marsupial head is about one-sixth the size of the smallest part of the parturient bony canal, the moment we pass to erect animals the greater relative increase is there in the cranial size, with coexisting decrease in the area of the outlet. This altered condition of things has caused the death of millions of otherwise perfectly healthy and well-formed human mothers and children. The palæontologist might tell us whether some such phenomenon of ischial approximation by natural mechanical causes has not caused the probable extinction of whole genera of vertebrates. If we are to believe that for our original sin the pangs of labor at term were increased, and also to believe in the disproportionate contraction of the pelvic space being an efficient cause of the same difficulties of parturition, the logical inference is inevitable that man's original sin consisted in his getting upon his hind legs.

Something of the changes noticed in the angle at which the head of the femur is set upon the shaft at different ages, is also noticeable phylogenetically. The neck of the femur in the child is obliquely placed, but in the adult is less so, and in advanced age tends to form a right angle with the socket. Both in the advance of age in the individual and the tendency of an animal to assume more and more the upright posture, this change of angle seems attributable to no other cause than bodily weight against the femoral heads.

This subject is not without direct application. Gynæcologists cause their patients to assume what is called the knee chest position, a prone one, for the purpose of restoring uteri to something near a natural position. Brown-Sequard recommends drawing away the blood from the spine in myelitis, or spinal congestion, by placing the patient on his abdomen or side with hands and

feet somewhat dependent. The liability to spina-bifida is greatest in the human infant through the stress thrown upon the spine, and the absence of delivery troubles among lower races has reference to discrepancy between pelvic and cranial sizes not having been reached by those races. The Sandwich island mother has difficult delivery only when her progeny is half white, that breed being larger in the forehead than the native child.

The mechanism of the body, when fully recognized as mechanism and nothing else, and as governed by mechanical laws, physical as well as chemical influences, will place forthcoming physiological studies upon a broader, safer foundation, and result in grand generalizations. The hydro-dynamics of animal life would alone furnish a theme for thousands of investigators. At present the world goes on in its blindness, apparently satisfied that everything is all right because it exists at all, ignorant of the evil consequences of apparently beneficent peculiarities, vaunting man's erectness and its advantages, while ignoring the disadvantages. The observation that the lower the animal the more prolific, would eventuate the belief that the higher the animal the more difficulties encompass his development and propagation, and the cranio-pelvic incompatibility alone may settle the Malthusian doctrine effectually for the higher races of men through their extinction.—*American Naturalist.*

M. DURVIX, a French medical officer of the army, says that the sole cause of the diminishing population in France lies in the abuse of tobacco. But who knows?

DR. CHARLES WILLIAM SIEMENS, the well-known scientist, engineer, and electrician, died in London, of rupture of the heart, November 20, aged 63.

J. MARION SIMS is said to have left ready for publication a story of Revolutionary times, entitled "Lydia Mackay and Col. Tarleton."

PROF. CHARCOT has been elected member of the French Academy of Sciences, in place of the late M. Jules Cloquet.

Items.

THE following circular letter has been distributed in Chicago, and deserves the attention of all our readers, as its object is in the highest degree commendable:

No. 6 SIXTEENTH ST, CHICAGO, ILL, Dec. 5, 1883.

Dear Doctor:

The Trustees of the Public Library, after conference with the Chicago Medical Society, have resolved to found a Medical Department in the Library, and to make appropriations for its maintenance and increase. As the public money available for this purpose is limited, the Chicago Medical Society has voted to expend $500 of its surplus funds to aid the enterprise, and has directed its Library Committee to appeal to every physician, dentist, and pharmacist to give a small sum for the same purpose. There are over 1,500 members of these three professions in the county, and a donation of two dollars from each will purchase a large number of practical works on Medicine, Dentistry, and Pharmacy, such as every one of them needs to consult. The Public Library will preserve the works, add to their number, and insure them against fire. They will not loan them out, but keep them always ready to be consulted and read in the Library rooms. We ask you, therefore, to kindly coöperate with us by sending two dollars in the enclosed envelope, with your name and address, to Dr. Edmund Andrews, the Chairman of the Committee on Library, to be expended for this object.

Very respectfully yours,

EDMUND ANDREWS, M.D., Chairman,
No. 6 Sixteenth St.
OSCAR DEWOLF, M.D.,
F. C. HOTZ, M.D.

Library Committee of the Chicago Medical Society.

COATED TONGUES.

The microscope gives the following as some of the articles found by microscopical examination on coated tongues: Fibers of wood, linen and cotton; fibers of spiral vessels; fibers of muscle, in one case eight hours after eating; starch grains; cheese mold; portions of potato skin; scales; moths, etc.; hairs from legs of bees; hairs from legs of spiders; pollen of various flowers; stamens of various flowers; hairs of cats, quite common; hairs of mouse, once only; hairs from various leaves; wing of mosquito once; fragments of the leaves of tobacco; chamomile flowers, etc. A list ten times as long could be made, but *jam satis*.

DECALCIFIED BONE DRAINAGE TUBES.—Professor Gross gives the following directions for making bone-drainage tubes. Procure the femur and tibiæ of a chicken or turkey, take off the periosteum, and place the bones in 16⅔ per cent. solution of official hydrochloric acid until they become soft; then cut off the ends and foree out the endosteum; replace in the hydrochloric acid solution until they become very soft; fill them with horsehairs, which must be removed if pus forms, as they will not allow it to pass. However, he recommends removing the bone tube in twenty-four hours, as it can only be absorbed by granulations, which render union by first intention out of the questton.—*College and Clinical Record.*

AT the recent annual meeting of the Fox River Medical Association, held at Geneva, Dr. Catharine B. Slater, of Aurora, was elected President. This Association is composed of the physicians of all towns in the Fox River Valley, and for a number of years had been presided over by Dr. Tefft, of Elgin. Dr. Slater will fill the position with dignity and ability, and with credit to herself and the association, though we believe there has been but one other instance in the West where a lady physician has been similarly honored. In the Aurora Medical Society also her talents seem to be duly appreciated, since she is officiating as secretary and treasurer of that organization.

THE New England railroads are credited with having killed in the past year 221 persons, and with having injured 535.

Miscellaneous.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STAES MARINE HOSPITAL SERVICE, OCTOBER 1, 1883, TO DECEMBER 31, 1883.

Bailhache, P. H., Surgeon, relieved from duty at Cape Charles Quarantine Station, Oct. 13, 1883.

Detailed as member of Board to examine candidates for promotion Oct. 30, 1883.

Granted leave of absence for thirty days, Nov. 27, 1883.

Hutton, W. H. H., Surgeon, granted leave of absence for twenty days, Oct. 1, 1883.

Wyman, Walter, Surgeon, detailed as member of Board to examine candidates for promotion, Oct. 30, 1883.

To proceed to Norfolk, Va., to investigate the conduct of the service at that port, Dec. 31, 1883.

Long, W. H., Surgeon, leave of absence extended ten days, Oct. 26, 1883.

Murray, R. D., Surgeon, to proceed to Ship Island Quarantine Station, Oct. 17, 1883.

To inspect sites for quarantine stations, Nov. 30, 1883.

Granted leave of absence for twenty days, Dec. 18, 1883.

Smith, Henry, Surgeon, granted leave of absence for twenty-five days on account of sickness, Oct. 13, 1883.

Relieved from duty at Norfolk, Va., Oct. 17, 1883.

To report to Surgeon Sawtelle, at New York, for temporary duty, Nov. 27, 1883.

Relieved from temporary duty at New York, and placed on waiting orders, Dec. 31, 1883.

Fisher, J. C., Passed Assistant Surgeon, when relieved by Assistant Surgeon Banks, to proceed to New York for duty, Oct. 29, 1883.

Granted leave of absence for thirty days, Nov. 28, 1883.

Goldsborough, C. B., Passed Assistant Surgeon, granted leave of absence for thirty-two days, on account of sickness, Oct. 12, Oct. 20, and Nov. 1, 1883.

Irvin, Fairfax, Passed Assistant Surgeon, to proceed to Norfolk, Va., and assume charge of the service, relieving Assistant Surgeon Glennan, Oct. 16, 1883.

Mead, F. W. Passed Assistant Surgeon, to proceed to Portland, Or., inspect the service, and report the condition of Assistant Surgeon Devan, Dec. 5, 1883.

To return to station, Port Townsend, Wash. Ter., Dec. 18, 1883.

Cooke, H. P., Passed Assistant Surgeon, to proceed to Charleston, S.C., for duty, Nov. 27, 1883.

Banks, C. E., Assistant Surgeon, detailed for temporary duty at Georgetown, D.C., Oct. 11, 1883.

Granted leave of absence for thirty days, Oct. 12, 1883.

Bennett, P. H., Assistant Surgeon, placed on waiting orders, Dec. 15, 1883.

Granted leave of absence for thirty days, Dec. 22, 1883.

Upon expiration of leave of absence to proceed to Detroit, Mich., for duty, Dec. 29, 1883.

Peckham, C. T., Assistant Surgeon, to proceed to Wilmington, N. C., and assume charge of the Service, relieving Passed Assistant Surgeon Irwin, Oct. 16, 1883.

Devan, S. C., Assistant Surgeon, granted leave of absence for ninety-five days, on account of injury and sickness resulting therefrom, Nov. 15, Dec. 5 and 22, 1883.

Bevan, A. D., Assistant Surgeon, to proceed to Portland, Or., and assume charge of the Service, Dec. 29, 1883.

Glennan, A. H., Assistant Surgeon, to proceed to New Orleans, La., for duty Oct, 17, 1883.

Wasdin, Eugene, Assistant Surgeon. to proceed to Mobile, Ala., for temporary duty, Oct. 11, 1883.

To proceed to Galveston, Texas, for temporary duty, Nov. 17, 1883.

PROMOTIONS.

Benson, J. A., Passed Assistant Surgeon, promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from Oct. 1, 1883. Oct. 4, 1883.

Banks, C. E., Passed Assistant Surgeon, promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from Nov. 1, 1883. Nov. 6, 1883.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.—The following officers were elected at the annual meeting of the College of Physicians of Philadelphia, held Jan. 2: President, Dr. Samuel Lewis; Vice-President, Dr. J. M. DaCosta; Secretary, Dr. Richard A. Cleeman; Treasurer, Dr. Charles S. Wurst.—*Maryand Medical Journal.*

OFFICIAL LIST OF MEDICAL OFFICERS AND ACTING ASSISTANT SURGEONS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, WITH THEIR STATIONS. JANUARY, 1884.

MEDICAL OFFICERS.

NAME AND RANK.	STATION.	NAME AND RANK.	STATION.
Supervising Surgeon-General.		F. W. Mead	Port Townsend, W. T,
John B. Hamilton	Washington, D. C.	H. P. Cooke	Charleston, S. C.
Surgeons.		H. R. Carter	San Francisco, Cal.
P. H. Bailhache	Washington, D. C.	W. H. Heath	Buffalo, N. Y.
John Vansant	San Francisco, Cal.	John Guitèras	Key West, Fla.
W. H. H. Hutton	Louisville, Ky.	W. A. Wheeler	Chicago, Ill.
T. W. Miller	Chicago, Ill.	J. A. Benson	Cairo, Ill.
Walter Wyman	Baltimore, Md.	C. E. Banks	Washington, D. C.
W. H. Long	Detroit, Mich.	*Assistant Surgeons.*	
R. D. Murray	Gulf Quarantine.	D. A. Carmichael	Pittsburgh, Pa.
C. S. D. Fessenden	St. Louis, Mo.	S. T. Armstrong	Memphis, Tenn.
Geo. Purviance	Boston, Mass.	P. H. Bennett	Detroit, Mich.
H. W. Sawtelle	New York, N. Y.	C. T. Peckham	Wilmington, N. C.
H. W. Austin	Cincinnati, Ohio.	R. P. M. Ames	Evansville, Ind.
J. M. Gassaway	Philadelphia, Pa.	S. C. Devan†	
Henry Smith*		F. M. Urquhart	St. Louis, Mo.
Passed Ass'ant Surgeons.		P. C. Kalloch	New York, N. Y.
G. W. Stoner	Portland, Me.	H. W. Yemans	San Francisco, Cal.
J. C. Fisher	New York, N. Y.	A. D. Bevan	Portland, Oregon.
John Godfrey	New Orleans, La.	A. H. Glennan	New Orleans, La.
C. B. Goldsborough	Mobile, Ala.	Eugene Wasdin‡	Galveston, Texas.
Fairfax Irwin	Norfolk, Va.	*Surgeon*, (Retired).	
		T. J. Griffiths§	Louisville, Ky.

*On waiting orders. †On sick leave. ‡ Temporary. § Consulting Surgeon, Louisville Marine Hospital.

ACTING ASSISTANT SURGEONS.

NAME.	STATION.	NAME.	STATION.
J. M. Allen	Milwaukee, Wis.	J. M. Main	Brownsville, Texas.
W. A. Banks	Rockland, Me.	W. C. Mason	Bangor, Me.
H. G. Bates	New Berne, N. C.	H. E. Mereness	Albany, N. Y.
B. F. Beebe	Cincinnati, Ohio.	J. D. Mitchell	Jacksonville, Fla.
R. D. Bibber	Bath, Me.	P. H. C. Noble	Richmond, Va.
J. E. Bready	Dubuque, Iowa.	Chas. Ottilie	La Crosse, Wis.
J. B. Brewster	Plymouth, Mass.	W. R. Page	Sandusky, Ohio.
S. D. Brooks	Boston, Mass.	T. T. Price	Tuckerton, N. J.
G. B Case	Cleveland, Ohio.	S. D. Robbins	Vicksburg, Miss.
S. B. Conover	Philadelphia, Pa.	J. A. Rowles	Chicago, Ill.
W. A. Cox	Pascagoula, Miss.	S. H. Sears	Newport, R. I.
J. B. Cromley	Gallipolis, Ohio.	Elmer Small	Belfast, Me.
Byron DeWitt	Oswego, N. Y.	W. N. Smart	Grand Haven, Mich.
Richard Douglas	Nashville, Tenn.	A. E Spohn	Corpus Christi, Texas.
A. W. Fisher	Toledo, Ohio.	J. G. Stanton	New London, Conn.
J. P. C. Foster	New Haven, Conn.	Theodore Starbuck	Fernandina, Fla.
T. L. Gelzer	Escanaba, Mich.	W. D. Stewart	Vineyard Haven, Mass.
L. P. Gibson	Little Rock, Ark.	G. H. Stone	Savannah, Ga.
Thos. Graham	Eureka, Cal.	D. H. Strickland	Erie, Pa.
W. M. Griffiths	Louisville, Ky.	Jos. Taylor	Shreveport, La.
G. A. Harding	Sault Ste. Marie, Mich	W. H. Taylor	New Bedford, Mass.
W. H. Heard	Newport, Ark.	A. S. Tebbs	Marquette, Mich.
B. S. Herndon	Fredericksburg, Va.	J. H. Vandeman	Chattanooga, Tenn.
H. S. Hersey	Bismarck, Dak.	M. F. Wentworth	Portsmouth, N. H.
L. W. Hodgkins	Ellsworth, Me.	C. A. Wheaton	St. Paul, Minn.
S. B. Hunter	Machias, Me.	R. C. White	Pensacola, Fla.
S. L. Jepson	Wheeling, W. Va.	Mortimer Wilson	Port Huron, Mich.
R. W. Johnson	Baltimore, Md.	J. E. Wood	Elizabeth City, N. C.
Sam'l Kitchen	East Saginaw, Mich.	H. S. Wyman	Sitka, Alaska.
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ARTICLE I.

MODERN SANITATION. SOME OF ITS FALLACIES AND RELATIONS TO THE ZYMOTIC DISEASES, WITH ESPECIAL REFERENCE TO THE DEFECTS OF OUR SO-CALLED "MODERN IMPROVEMENTS." By G. FRANK LYDSTON, M.D., late Resident Surgeon Charity Hospital, and State Emigrant Hospital and Refuge, New York City; Lecturer on Genito-Urinary Diseases, College of Physicians and Surgeons, Chicago, Ill. Read before the Chicago Pathological Society, November 12, 1883.

The subject which I have the honor of presenting to the society this evening, is one in which I have always taken the deepest interest, and one, too, upon which I have had occasional opportunities to make practical observations; but when the idea of embodying the results of those observations in an article first

suggested itself to me, I was somewhat at a loss for a title suitable to such a topic, and since beginning the work I have keenly realized the fact that the one selected is so broad and comprehensive in its scope, that the few ideas which I shall endeavor to present to you this evening are incapable of doing it justice. One can hardly realize the vastness of such a subject, until he has himself attempted its discussion. I must, therefore, apologize for the disappointment which may quite naturally be experienced from the comparison of the title of this paper with the subject matter which it contains.

The subject of modern sanitation is by no means a new one, but it is of such great practical importance that a presentation of new ideas in relation to it, or even a discussion of well recognized facts bearing upon it is seldom out of place, and in my estimation the time is not far distant when our medical colleges will add the teaching of at least the rudiments of practical sanitary engineering to the duties of the chair of hygiene. The knowledge thus acquired will give to the physician of the future a marked superiority over him whose learning consists mainly of ideas concerning a third blood corpuscle, or a newly discovered cell in the cortex of the brain of the dog; who, in other words, has literally been taught to "strain at gnats and to swallow camels." In order that such sanitary teaching shall be of practical benefit, and not an actual injury, considerable modification of many of the present views and customs of sanitarians will become necessary. If I were asked to name the most potent cause of sickness among the population of our large cities, and the most important influence tending to promote the dissemination of those diseases termed at the present day "germ diseases," but which, for the benefit of those who object to the army of infinitesimal organisms, we will term the "zymoses," or miasmatic affections, I should answer, "modern improvements," and I should feel that I had spoken volumes of practical truths in those two words. "But," it may be asked, "is not our expensive plumbing founded upon correct principles, and can there be anything better as a preventive of the evil effects of filth accumulations and noxious materials of various kinds?" To this I would simply answer, that the principles of modern plumbing are not

only not correct, but they are radically wrong; and instead of being a safeguard against disease, they actually promote its extension.

Next to an entire disregard for sanitary matters and simple cleanliness, the plumbing of the modern mansion is the worst system that could possibly be adopted for the purpose for which it is devised. It defeats its own object, and under the present system of drainage the plumber, however skilful, is simply attempting impossibilities, and as might naturally be expected, is continually failing. I think that I am perfectly safe in asserting that there is not in Chicago to-day a perfect piece of plumbing, or a drain trap that perfectly fulfils the object for which it is intended. Our more advanced sanitarians are fast coming to realize the imperfections of our plumbing and sewerage systems, imperfections that are a necessary evil, no matter how great the outlay of time, money, and skill that may be made in the attempt to introduce perfect plumbing and drainage into our dwellings. If such a thing exists, I should like to be shown a single perfectly ventilated soil or drain pipe, or sewer, or a perfectly trapped water closet in this city. Examples may be cited in which such things are supposed to exist, and quite reasonably, too, if we consider merely their expensiveness and elaborateness of detail, but it will be found that none of them will bear searching and scientific criticism. The reason for this is quite simple, viz.: *the absolute impossibility of producing any mechanical arrangement for the purpose of preventing the escape of noxious vapors and gases into our houses, which is free from defects, and will perfectly fulfill the function for which it is devised.*

In calling attention to the fallacies of our modern sanitary arrangements, we will first consider that nowadays apparently indispensable convenience, the bath or water closet, with which our houses of even modest pretensions are generally supplied. As a rule, we find this closet upon the same floor with numerous sleeping apartments, being probably so placed in order that the unconscious occupants may have the full benefit of the expensive plumbing, with its manifold defects, and noxious emanations; in short, that they may duly appreciate the luxury of "all modern improvements," which have been, perhaps, so highly lauded as the chief attraction in that particular dwelling. Sometimes the

closet is situated upon the upper floor of the building, in which situation the ventilation is possibly better, and the evil consequently somewhat mitigated, but more often it is in the middle of the house, or as in the case of our modern flats, each floor is suppliedwith a closet. But the situation is not all that is open to criticism; usually these closets are illy ventilated, and completely secluded from the sunlight. Even pure air, deprived of light and the molecular change afforded by ventilation, grows stagnant and devitalized, and its oxygen inactive*, in which condition it is decidedly unwholesome, and how much more important must be the changes in air loaded with fecal emanations and the various noxious effluvia which arise from the human body. Allowing that the closet is perfectly trapped—which in my estimation is an impossibility—there must necessarily be noxious exhalations diffused through the atmosphere while the closet is in use, and if these are not quickly removed by thorough ventilation they must necessarily undergo organic changes, which render them particularly obnoxious to the health of individuals occupying the house. This is especially apt to be the case if the closet be used by persons who are in ill health from any cause, and whose excretions are consequently abnormal. Whether the germs of disease may develop *de novo* under such unsanitary conditions is a mooted point, I, myself, however, being of those who believe in such a spontaneity. Or, lest I be understood as being a believer in spontaneous generation, I will qualify my statement by asserting that I believe that under such circumstances the innocuous organisms always present in the atmosphere in greater or less number may undergo a change, and acquire new properties by virtue of which they become infectious, and capable of transmitting disease. An apparent illustration will be cited later on.

That the specific germs of various diseases will, when introduced into a room loaded with animal exhalations, multiply rapidly and increase in virulency is, I presume, disputed by no one. Now, as for the trapping of this water closet, it has been conceded by good authorities that a perfect system of trapping has yet to be invented. No trap, however perfectly constructed, as far as

*Richardson, in his Diseases of Modern Life, calls especial attention to this point, which is quite generally ignored.

mechanical principles are concerned, can completely prevent the upward passage of the noxious volatile gases and vapors arising from the soil pipe. This may be better appreciated by considering the fact that there is always an upward pressure upon the distal side of the valves exerted by the volume of gases arising from the sewer, and in addition a continuous suction force upon the proximal surface of the trap, produced by the rarefied atmosphere of the closet. The ball valve, S. and P. water traps are alike defective, and although they may partially prevent the passage of gases when they are closed, none of them offer much hindrance to the escape of a considerable volume of gases and noxious vapors the instant the trap is pulled open. I should like to see a movable joint or valve which is so nicely adjusted and the surfaces of which are so accurately apposed that no gases can pass it. Gases which may under moderate pressure be forced into and through a granite block, are not likely to be greatly obstructed by anytrap, however nicely its joints may be made. An attempt to overcome this defect in the trap is illustrated by the S. or water trap. In this instance, the gases are supposed to be absorbed by the water, which is constantly standing in the trap; but unfortunately, the small amount of gases retained by the water is infinitesimal, as compared with the whole amount which rises from the pipes, and as a consequence we have the residue over and above the absorptive power of the water to retain such materials, simply filtered through it, and up into the atmosphere of the room, shorn perhaps of a portion of its offensive odor, but not a whit less noxious than when it left the sewer.

As I have already intimated, the air of the bath-room is always at a higher temperature than the air, gases, and vapors in the soil pipe and sewer, and there is consequently a suction force on the one hand and an upward pressure of gases against the trap upon the other, favoring a sudden influx of gases and vapor into the room, as soon as the trap is opened. No trap, it seems, can be made so perfect that this influx will not occur in greater or less amount, and there is therefore no remedy for the evil as far as the mere escape of these substances is concerned. But their noxiousness is partially remediable, for it is perfectly feasible to destroy any specific or poisonous property which such effluvia

may contain. This can only be done by chemical means. The trap should be so arranged that the water will run for some time after it has been opened and closed, and its valves should be double, and disposed in such a manner that when the upper one is opened, the lower will be closed, and *vice versa*. Between the two, and in the S, if such be the form of the trap, there should be a space constantly filled with a considerable qnantity of water, and into this a solution of zinc chloride, sulphate of iron, or similar disinfectant, should be trickling continually, during the time that the stool is being used, and should run for a short time after its use has been suspended. This should convert the water which constantly stands in the trap into a solution sufficiently powerful to effectually decompose all foul gases, and to destroy all disease germs which may be present in the effluvia of the sewer. These are the indications, and it only remains for the proper mechanical principles to be applied, for their fulfillment. A recent invention called the "germicide" attempts to meet these indications after a fashion. It even goes further, and by a disinfectant (?) spray, endeavors to destroy the noxious emanations which arise during the use of the closet. The apparatus is well enough in its way, but nothing will fully meet the indications, that is not a composite part of the trap itself, for in the absence of proper mechanical principles, such a contrivance is almost worthless.

Even when constructed as I have indicated, the trap will not perfectly fulfil its function, for there must necessarily be some escape of gases during the flow of materials from the pan to the trap, and from the trap into the soil pipe, at a time when the disinfectant solution is too dilute to be of service. As for the spray mentioned, it is an attempt to "slay an elephant with a popgun," and should be replaced by free ventilation, and the admission of the sunlight, in the absence of which the processes of oxidation and chemical decomposition in nature's laboratory with difficulty occur. These suggestions have been made under the supposition that the water closet in dwellings is insisted upon, and that we are compelled to make the most of a bad bargain. We may, by following these suggestions, mitigate the evil, bu cannot entirely remove it. Would it not be better to lay th

demon completely by dispensing with the closet in the dwelling, and building it as a separate establishment, not after the style of the old-fashioned privy—which is, however, in my estimation, far preferable to the modern closet, as far as its influence upon sanitation is concerned—but with the style of trap already indicated? But there is a stronger element of danger to the health of the inmates of our modern dwellings than that afforded by the water closet, *per se*, and that is the stationary wash basin.—The bath tub is usually situated in the water closet, and simply adds its evil propensities, which are identical with those of the stationary wash basin, to those of the closet proper.—Here we are absolutely helpless, as far as I can see. Practically, the man who sleeps in a room provided with one of these conveniences is in direct and most intimate relations with the sewer. His sleeping apartment is at one end of a direct channel of communication with the excreta, and refuse material of the whole neighborhood. The arrangement is much like the apparatus for the administration of nitrous oxide gas. We will let the sewer stand for the reservoir of gas, the waste pipe for the tube, and the room for the mouth piece, but instead of putting the latter over the mouth of the individual, we will most conveniently put him inside of it. The gas is already turned on, and all our victim of misplaced confidence in plumbers has to do, is to breathe as usual, and he will get his system nicely saturated with sewer gas, together with any little donations in the shape of disease germs, which may have been contributed by his sick neighbors. His sleeping apartment is the terminus of a channel of stenches and filthy vapors too numerous too mention, and of germs the most various and infectious.

Our sewers are so imperfectly ventilated, that they are constantly full of gases, which, from their close confinement and tendency to expansion, are necessarily exerting a constant pressure in all directions, and are bound to escape in the direction offering the least resistance, and consequently enter the various offshoots and soil pipes opening into the main sewer. At the end of some one of the various diverticula of these modern improvements, we have a room, the heated air of which exerts a continuous suction force,

and literally draws the gases upward.* In this room we find the man to whom we alluded a moment ago, sleeping perhaps, and all unconscious of the unsavory condition of the atmosphere. The windows may be tightly closed, lest a single molecule of the lovely sewer-gas should escape. I think that nearly all of us must have noticed the gurgling produced by the waste water as it escapes from our wash basin. Now, it is not the downward suction force of the waste pipe that causes this; *it is the displacement of the gases and vapors in the pipe by the escaping fluid, and these gases, when thus displaced, rise, and escape into the room.* What better proof of my statements could be adduced? "But," it may be argued, "the room does not smell of sewer gas, and is surely not in very bad condition." Very good; the room does not smell badly, perhaps, but that is no proof that its atmosphere is in a healthful condition, or that sewer emanations are not present in greater or less amount. Now, what is "sewer gas," so-called? It is not a definite compound, but is composed of sulphuretted and carburetted hydrogen, ammonia, watery vapor, various organic matters in a state of putrefaction, and, worst of all, very often it contains the specific germs of disease.

The odorous elements of this villainous compound are perhaps the least noxious of all, and the worst cases of sickness resulting from sewer emanations, are often experienced in dwellings in which no odor is perceptible. As for the odor of sewer gas, were it not for its presence in most instances we would have no protection whatever, for it warns us of impending danger.

Why is it that there is such a continual warfare upon the various beneficent stenches? They are our only salvation. It would be well for some of our sanitary enthusiasts to attempt the destruction of the enemy itself, instead of wasting their time and energies in disfiguring its uniform and colors. But more of this hereafter. We will now return to our man. If you remember, we left him peacefully respiring a choice mixture of gaseous and organic substances contributed by the sewer in the middle of the street. This alone was bad enough, for, as Richardson says, "the disease *par excellence* derived from the sewer, is that con-

* *Vide* an interesting article by Prof. Max von Pettenofer on "Ground Air in its Hygienic Relations." *Pop. Science Monthly*, July, 1877.

tinued fever which is induced by the natural atmosphere of the sewer, by the inorganic products of organic decomposition, of which sulphuretted hydrogen(?) plays a leading part," but he is subjected to something infinitely worse than mere communication with the sewer. He is in direct communication with a case of diphtheria, scarlet fever, typhoid, or other similar affection, a few doors or perhaps some blocks away. The excreta from this patient are thrown into the closet, as a rule, without any attempt at disinfection, and finally reach the sewer, to add specific properties to the already great noxiousness of the composite whole which we term "sewer gas." Now, this condition of affairs has not been allowed to exist without attempts to remedy its evils, and, obviously, the most natural thing in the world would be to attempt to prevent the entrance of gas into the rooms—*i. e.*, to prevent the damming back of the gases and vapors into the dwelling, by ventilators interposed at various intervals in the course of the soil pipes. This is very often done, but almost invariably imperfectly. The ventilation is insufficient, the ventilating pipes being too small; and, above all, there is no upward current in the ventilators, and the gases, as a consequence, ignore them entirely, and pour by, and up into the house. Now, if we must have a waste and soil pipes, let them at least be ventilated as perfectly as possible. The main sewer should have open ventilators at frequent intervals, and should be frequently flushed, preferably by the method adopted in certain portions of Paris, by a continuous stream of water allowed to run in the gutters morning and night. There should be one large ventilator between the opening of the soil pipe into the sewer and the building, and there should be at least two ventilating shafts communicating with the soil pipes in the building. These should be perfectly straight, and should open at the top of the house, or preferably, into the chimney. They should either pass near the furnace or should open into a heated chamber at the top of the building, thus ensuring a draught in the pipe, and an upward movement of the noxious gases arising from the sewer, which have been intercepted as they were being dammed back into the house. *Without some such arrangement, ventilating shafts are absolutely worthless, for the gases and vapors will inevitably pass by them,*

and instead of rising into the cold air at the top of the house, will seek the far warmer and more inviting atmosphere of the rooms at the ends of the waste pipes.

Now, supposing we have succeeded in rendering our water closet innocuous, or nearly so, and have ventilated our soil pipes and sewers, we ought to feel quite secure, *and so we might be, if our plumbing was only perfect, but it is absolutely impossible to make it so.* The reasons for this have been set forth quite clearly by Dr. F. H. Hamilton*, and there is no disputing his conclusions. There is more security in iron pipes, according to this authority, than in lead, but they rust easily, unless protected by what is known as porcelain lining, and they are not only expensive, but very awkward in manipulation, and obviously unfitted for use where pipes of small caliber are required. In the case of leaden pipes, galvanic action is set up in the elements contained in the solder composing their joints, as a result of which they became corroded and defective in a very short time. As a consequence, no house is safe from the evils of imperfect plumbing, unless the pipes are very frequently inspected, and rarely will they remain perfect for a year. In addition, it is always difficult, and often impossible, to detect all imperfections which may exist, and prove elements of danger. Under these circumstances, there is only one means of safety, and that is, as Hamilton suggests, to remove all "modern improvements" from our residences. Let a separate building be set apart for baths, water closets, stationary wash basins, and the like, this building communicating with the main building by a well ventilated passage-way, so arranged that the door of the extension and the door of the main building can never be open simultaneously.

Quite a number of intelligent persons have already adopted modifications of this plan, or similar ones, and it is a striking fact, that some of our most pretentious private residences and hotels in the East have had their various modern conveniences, and especially the stationary wash stands removed. In Vanderbilt's new residence, I believe, they have been entirely omitted. When this plan is not followed, the next best thing to be done is to follow the plans of disinfection, free ventilation, and frequent

*New York Medical Gazette, March 25, 1882.

and careful inspection of the plumbing, already set forth. The war cry of the sanitarian of the future will doubtless be—providing he is not compelled to practice medicine for subsistence, in which case he might quite naturally be expected to advocate the plumber's cause—"away with modern improvements!" very much as our German friends are crying: "fort mit dem spray!" but with a great deal more justice.

A very important feature of modern sanitation is the season, as well as the manner of erecting buildings. The mistake is quite commonly made of erecting buildings in winter, when the moisture in the masonry and other materials can not evaporate,and allowing them to be occupied before the walls have thoroughly dried out. It is estimated that a good brick can absorb about 10 per cent. of its own weight of water. Assuming that it only takes up 5 per cent., and allowing about 100,000 bricks to the building, and about 5 per cent. weight of water for the mortar, which is a very low estimate, we have 100,000 pounds, or 10,000 gallons of water in the composition of an ordinary brick dwelling, which must evaporate before it is fit for habitation.* These damp walls disturb the equilibrium of the bodily temperature of the occupants of the house, chiefly by rapid abstraction of heat, and as a result we have those vaso-motor disorders, and organic changes due to "taking cold," viz.: rheumatism, catarrh, bronchitis, Bright's disease, etc. I do not wish to be understood as recommending impervious building materials, for porous materials and pervious walls are absolutely necessary to keep the air of our dwellings dry and wholesome, but they must be kept dry and pure by heat and free ventilation, and no house should be occupied until it has been thoroughly dried and aired. Above all, when the house is finally occupied, the air should be kept sweet and pure, and free from sewer emanations, lest the porous building materials absorb and elaborate noxious gases and vapors. If the walls of our dwellings are saturated with water, it is obvious that all moisture over and above their capacity for absorption must either condense upon their surfaces and the bodies of those persons occupying the rooms, or remain in the atmosphere as vapor. By this vaporous condition of the atmosphere the heat of

* Pettenkofer Op. Cit.

the animal body is not only abstracted too rapidly, but the eliminative function of the skin is prevented, or at least diminished. As a result of the vaso-motor disturbances and derangement of physio-chemical changes thus induced, we have internal congestions, fever and a vicarious strain upon the mucous membranes of the respiratory and intestinal tracts and kidneys. In short, we have a cold, and with it perhaps an inflammation of that portion of the economy least capable of resisting the strain. As has been stated, these injurious effects of dampness may be prevented by free ventilation and warmth. New buildings should be thoroughly dried out by heat, and the free use of unslaked lime, before occupation.

But porous building materials have some disadvantages, the chief of which is the difficulty of disinfecting them when once they have become saturated with noxious vapors and gases, which they so readily absorb, and almost as readily give up again after they have absorbed a certain amount. Thus a building, the walls of which have once become saturated with sewage emanations, or the emanations of a large number of human beings, *i. e.*, crowd poison, will retain its poisonous properties for an indefinite time. This is especially apt to be the case with sick rooms and hospitals, which may continue to generate disease and increase the virulency of the contagion which they elaborate until they are absolutely untenable. The ordinary measures of disinfection are inefficient to correct this condition, for the reason that they are not sufficiently powerful, and do not reach the disease germs which are contained in the pores of the masonry and wood work. An instance of this kind was seen at Bellevue Hospital some years since. The building had become so saturated with poison that to be operated upon in Bellevue Hospital meant death by pyæmia. Every measure of cleansing, ventilation, and disinfection seemed ineffectual, and the only thing left would have been the entire destruction and rebuilding of the hospital if the matter had not been placed in the hands of the eminent chemist, Professor Doremus. This gentleman cleared the hospital of its inmates, and generated enormous quantities of chlorine gas in the wards, by means of the chloride of sodium, sulphuric acid, and the binoxide of manganese. The building having been tightly closed,

was allowed to remain filled with the gas for some days, after which time it was again occupied, and was found to be perfectly disinfected, pyæmia being subsequently a thing of rare occurrence. The chlorine had penetrated the walls of the building and destroyed the germs of disease which had been retained and elaborated in their substance; and it was only by the use of this powerful disinfectant, and in quantities sufficient to instantly destroy the life of any human being who might be so unfortunate as to inhale it, that these little organisms could be destroyed. Chlorine gas is especially adapted for purposes of disinfection, on account of its powerful affinity for hydrogen. Nearly all noxious vapors and gases, or those at least which emanate from the animal body, are composed largely of hydrogen, and once this is removed, they are decomposed and their noxiousness destroyed. Chlorine gas then is the disinfectant *par excellence*, and all other disinfectants are very inefficient by comparison.

Building materials vary somewhat as regards their porosity or perviousness to gases and vapors. Sandstone and brick are quite permeable. Wood absorbs noxious materials quite readily. The principal substance used in the construction of buildings, as far as its powers of absorption and permeability to gases are concerned, is the mortar or plaster. Granite and limestone are not very permeable, but such a large quantity of mortar is necessary in joining them, that this impermeability is more than compensated for. Thus it may be readily seen that any building may under favorable circumstances become unfit for habitation, and especially for hospital use, from simple absorption of poisonous materials from the air within it. In this manner, many buildings become so saturated with the contagion of different diseases, that their entire destruction by fire would be the most sensible and economical method of of disinfection. I have personal knowledge of several buildings of this kind, the relations of which to their occupants are of the utmost importance. The first of these that I will mention is the New York Maternity Hospital. This is built in the form of a low wooden pavilion, or cottage, and is about half a mile from the main building of Charity Hospital, Blackwell's Island, of which it forms a part. This building had been used for an obstetrical ward entirely, and had been in use

for several years. Outbreaks of puerperal fever, at the time of my service at the Charity Hospital, were frequent, and it was my good fortune to select the waiting wards in which the women were retained until confinement was imminent, as an adjunct to my surgical service. In fact, outbreaks of fever were so frequent at the Maternity, that the waiting wards afforded a better midwifery service than the obstetrical service proper, all of the cases being delivered in tbe waiting wards during an endemic of puerperal fever at Maternity.

Now it was rather a peculiar fact that cases of fever were rare in the waiting wards of the main hospital, in which the attending physician had a general service at the same time, while they were frequent at the maternity proper, where there was a special corps of physicians who were not allowed to enter the general hospital wards or attend surgical operations, for fear of infection. An additional circumstance in favor of a successful obstetrical service, was that *all cases complicated by malaria, syphilis, Bright's Disease, or anything favoring puerperal complications, were at all times retained in the waiting wards.* Now, the simplest explanation of these peculiar facts is, that the maternity hospital had never been thoroughly disinfected after the development of puerperal fever, and the poison had consequently kept accumulating, until the building was absolutely unfit for an obstetrical ward. At the main hospital a large number of cases of labor only occurred during the time that there was an endemic of fever at Maternity, and consequently, at other times the opportunities for the occurrence of fever were relatively few. The maternity building has recently, I believe, been given up entirely, as it should have been long ago.* At the time of my own service, the women were in such dread of being sent to the maternity hospital, on account of the frequent occurrence of fever in its wards, that they would often conceal their pains until too late for their transference to that institution. Another even more striking instance of the pestilential properties acquired by buildings used for the shelter of large numbers of human beings, may be seen at Ward's Island,

* In a letter to the *N. Y. Med. Record* for Dec. 23, 1882, I set forth as another reason for the prevalence of puerperal fever in the maternity hospital, the indiscriminate syringing, and other meddlesome midwifery, and constant battle with "germs" in vogue in that institution.

New York. On this island, and under the control of the State Emigration Commission, are two large wooden structures, known respectively as the "barracks" and the "nursery." In one, indigent adult male emigrants are kept, and in the other the women and children. Cases of enteric fever arose quite commonly among the men and women, which were probably due to the general unsanitary condition of both barracks and nursery, but other diseases, excepting, of course, an occasional case of small-pox, which was immediately isolated, were rare, only because adults are not very susceptible to the contagious exanthemata. Among the children, however, the results of habitation of infected buildings were only too evident, for just as soon as a family was sent to the nursery, nearly all the children who had not had measles or scarlatina, contracted one or the other disease. Indeed, it was a common thing for one or the other gentlemen of the medical staff and myself, to speculate as to the number and variety of cases which we would receive into the children's wards from some large family sent to the "nursery."

Now it may be asked, why we did not remedy the evil, and such a question would be quite natural, coming from any one who has never had the pleasure of serving in a public institution controlled by politicians, but those who have had such service can readily appreciate the fact that protests upon the part of the staff were but a waste of breath, not to speak of the dangers of the official guillotine. Whether a hospital millennium will ever arrive, is a question, but it most assuredly never will until hospitals are placed under the absolute control of their physicians. In the instances which I have quoted, the torch would have been the only efficient remedy. For my own part, I believe that all expensive buildings, which are used for hospital purposes, should be periodically disinfected with chlorine gas. They should be so arranged that no ward can be in continuous use for more than six months, or at most a year, the pavilion or cottage hospital plan of construction being the best for this purpose, as one building can be thrown open and kept thoroughly ventilated for months if necessary, while another is being occupied. The best plan, perhaps, would be to build inexpensive structures, which can be destroyed entirely after a certain time, and rebuilt, thus doing away

with inefficient disinfection, and the possibility of saturation with the poison of disease. By these means only can our houses and public institutions be prevented from becoming literal hot-beds of disease.

A very important fact relative to modern sanitation is brought forward by Pettenkofer, in his lectures upon hygiene, viz.: "The permeability of the soil to air and gases of all kinds. By a consideration of this property of the earth, one can readily understand how accumulations of filth in the cellars or basements of houses may give rise to serious results in the occupants of dwellings some distance away. Earth, which is so generally regarded as a most potent disinfectant, will absorb gases, but will not retain them necessarily, and never over a certain amount; it will filter both gases and fluids, but *it will not necessarily remove their noxious properties for evil.* This is important as showing that *local unsanitary conditions may through the medium of the porous soil and independently of the sewers produce deleterious effects in persons whose dwellings are some distance away from the site of filth accumulation.* This should be remembered, as it may serve to explain many otherwise inexplicable cases of disease. To quote Pettenkofer: "Remarkable testimony as to the permeability of the ground, and of the foundation of our houses, has been given by gas emanations into houses which have no gas laid on. I know of cases where persons were poisoned by gas which had to travel for twenty feet under the street, and then through the foundations, cellar vaults, and flooring of the ground floor rooms." To my own mind, this permeability of the soil explains the origin of some of those apparently inexplicable cases of typhoid fever in which the cesspools and closets of the dwelling are on a lower level than the well from which the drinking water is obtained; this arrangement being supposed by many to be an insuperable obstacle to the propagation of typhoid fever through the medium of the drinking water. It seems highly probable that the poison of typhoid fever may exist as a diffusive miasm—containing germs if you will—which may pass upward and in all directions from the focus of infection. If this be disputed for typhoid, it must be allowed that sewer emanations will thus dif-

fuse, and produce an enteric fever, so closely allied to typhoid as to be almost indistinguishable from it.

In spite of many apparently absolutely inexplicable cases of typhoid fever, and the skepticism of many of our best authorities, it is still my own humble opinion that every case of the disease originates in some local unsanitary condition, which may operate through the medium of either the air respired or the water drunk by the affected individual. The air of a foul cellar may give rise to typhoid fever in the people occupying the house above, through their respiratory tracts, quite as readily as can pollution of their drinking water by filth. That the poison of typhoid consists in living organisms or germs, has, it seems to me, been demonstrated;* but I believe that the innocuous organic particles or germs, which are everywhere present in the atmosphere, may, under certain circumstances, acquire new properties, by virtue of which they are capable of transmitting diseases of a specific character, the type of disease being modified by the peculiar local conditions present. The typhoid, or, for that matter, the typhus poison, may arise spontaneously, not from "spontaneous generation," which we hold to be impossible, but by the spontaneous development of specific properties of infectiousness in organisms previously harmless. The best remedy for the danger of the entrance of noxious vapors and gases into houses through the medium of the ground, is to build the walls of the foundations of our dwellings double, leaving a wide area between them, which will also answer the purpose of protection against damp, as is suggested by Fothergill.† This area should, of course, be perfectly ventilated. In addition, the cellar floor should be double, a space being left between its layers, which communicated with the area, and is thereby freely ventilated. As an additional precaution against damp, the outer walls and the floor of our cellars might be constructed of glazed tile or concrete, as advised by the authority just quoted. This arrangement, with free ventilation between the walls of our buildings, would probably be as near

* Vide theory formulated by Desplat and supported by Klebs and Eberth. *Bulletin Gen. de Thérapeutique*, June 30, 1883.

† "Maintenance of Health."

an approach to sanitary perfection, as far as the evils which it is designed to combat is concerned, as could well be devised.

There is a peculiar feature of modern sanitation that sometimes leads me to wish that disinfectants had never been invented. I refer to the tendency on the part of the municipal authorities—and, for that matter, many physicians as well—of some of our large cities, to fight existing or impending epidemics, or even sporadic cases of disease, very much after the fashion of a Chinese method of warfare—with "stinkpots." Now, this plan of action would doubtless be very effective, if our little disease germs were only vulnerable to stenches; but, alas! they are not, for if they were, extinction of the whole race of germs, bacteria, micrococci, etc., would be an easy matter at the hands of some of our friends. But for this tendency to attempt the suffocation of germs. Cer tain people, both among the laity and in our own ranks, enter tain the delusive idea that all that is necessary to destroy the noxious properties of filth and decomposing matters, whether animal or vegetable, is to give them the odor of carbolic acid, or some other vile smelling compound. In so doing, what do they accomplish? They simply substitute one vile smell by another which is often more intolerable than the original which it is intended to destroy, and which is particularly objectionable in that it lulls them into fancied security. I saw this exemplified in New York City in 1878, during the epidemic of yellow fever in the South. Great and well-founded apprehension was felt by the people lest the disease should appear in the city, and indeed every element necessary to its development was present, all that was necessary being the application of the torch to the tinder, as the city was abominably filthy, and the season a very hot one. Now, obviously the proper course would have been to clean the city thoroughly, and remove, or, preferably, destroy all the rubbish and filth. But, instead of doing this, the authorities cleaned(?) up the filth in a slip-shod way, which merely stirred it up into renewed activity, and then spilled carbolic acid around in a promiscuous manner until the atmosphere was almost intolerable. I verily believe that high-colored urine must have been epidemic at that time, so redolent was the air with carbolic acid, the quantity being only a little short of sufficient to kill the people, and a

great deal short of the amount necessary to destroy germs. Thanks to this thorough disinfection (?), perhaps, but more likely through the interposition of Providence, the city escaped the yellow fever; but in 1881* a fine harvest was reaped in the shape of an epidemic of typhus fever, which was clearly traceable to local unsanitary conditions, in spite of the efforts to shift the responsibility upon immigration and importation of the infection †. The first cases of the disease observed entered the Charity Hospital, Blackwell's Island, and were severally under the care of Dr. Merriam and myself, and in a very few weeks after their detection we were actually overrun with typhus, there being at one time about 160 cases of the disease upon the island. Upon investigation, the origin of the disease was found to be what was known as the Shiloh lodging-house, in the slums of the city. This establishment was formerly a church, but had fallen into decay, and had been converted into a sort of tramps' retreat, a charge of 5 cents being made for a bed upon a bench, sleeping under the benches being said to be free, providing the lodger lived till morning and chopped a stipulated quantity of wood. The lodging-house did a thriving business, and the advantages for the spontaneous development of disease were very fine. The majority of the cases of typhus originated here, fully 150 cases being traceable to either direct or indirect contagion from it. Cases soon sprung up, however, in various other localities, the Italian tenement houses being especially prolific. As far as this epidemic was concerned, I had occasion to feel cordially thankful toward the city fathers and their stinkpots, for the opportunities for clinical and pathological observation thus presented were exceptionally fine, and in fact I have little curiosity to gratify in regard to typhus at the present time, and I might add in regard to cholera, also, although I have had no experience with it. I think, however, that some of those present who have had experience with these diseases will echo this sentiment. We will hope that our own exceedingly conscientious and indefatigable(?)

* In 1880 I believe, the city was in such a filthy condition, that mass meetings of physicians were held to urge precautionary measures on the part of the authorities, This mitigated the evil somewhat, so that the above mentioned epidemic of typhus fever was much milder than it would otherwise have been.

† Liverpool was, I believe, the alleged source of infection.

municipal authorities will not adopt the odoriferous and fallacious plan of prevention that I have described.

But what is to be done in lieu of such a course? Let the streets, alleys and sewers of our city be thoroughly cleaned, and the accumulations of filth removed and destroyed as far as possible, by burning or quick lime, or in certain instances let it be removed a long distance, and spread in thin layers upon the soil, and allowed to dessicate. Let the sewers, soil and drain pipes be frequently flushed, and thoroughly ventilated, and all cesspools and collections of stagnant water be opened up and cleaned, after which allow them to remain exposed to the air and sunlight. After all has been done that pure water, good ventilation and the sun's rays can accomplish, it will be ample time for "disinfectants," which are well enough in their way, if they are not used to disguise the effects of filth emanations, when the cause should be removed. The application of disinfectant drugs is ordinarily too much like the administration of many so-called "specifics" in cases of disease. *Let the cause be removed, and there will be little use for such substances.*

As I have stated, the use of the stinkpot is not entirely confined to either Chinese warfare, or modern municipal or lay sanitation, but it is exceedingly popular with many intelligent physicians. How often we may enter a sick room and find the windows tightly closed and the light carefully excluded, and be greeted with the odor of chlorine, carbolic acid, or similar substances. There is no characteristic sick room smell, and in the language of the physician and friends, the apartment is perfectly "disinfected." Disinfected by what? On looking carefully around we find on the window sill, under the bed, or in the various utensils about the sick room, little dabs of chloride of lime, or squirts of carbolic acid, which might be termed homœpathic attempts to kill an elephant. And this is disinfection! Save the mark! Would it be possible to convince this physician and these people in attendance that it would require chlorine gas or carbolic acid enough to kill the whole household to even benumb one of the little germs which act as carriers of disease? Or would it be possible to demonstrate to them the fact that there is an increase in the tenacity of vitality as we descend in the scale

of organic life? If so, a great and philanthropic work of charity would be accomplished. Let the physician try to destroy one of these little germs. He will find that they are destroyed, or as some claim, merely benumbed, by a 1 to 2 per cent. solution of carbolic acid. Let him now, if possible impregnate the air of the sick room with carbolic acid to a strength of 2 per cent., and what would become of his patient? It is safe to say that he would soon be pretty thoroughly prepared for a pathological collection. Or let him, as an experiment, try the destruction of the germs in the living blood, in any given case of disease, *a la* Declat, and note the effect of three or four ounces of carbolic acid in the circulation. Now remove the disinfectants (?) from this close sick room, and what do we observe? An indication previously unobserved on account of the stench of the disinfectant, viz.: a fetid and characteristic odor, perhaps of a special character, peculiar to the disease from which the patient is suffering, but in any event disagreeable and unhealthful, and which says in unmistakable language: "Open the windows and let in the sunshine and fresh air." This is a progressive age, and it is to be hoped that he timely prevention of epidemics, and the evil effects of infectious miasms, will be one day managed upon common sense principles, and combated by nature's disinfectants which oxidize and destroy, instead of by disinfectant drugs, whose chief claims to consideration lie in the intensity of the stench which they are capable of producing. Let us have less carbolic acid and more hydric oxide, sunshine and "God's oxygen."

125 State St., Chicago, Oct. 1, 1883.

ARTICLE II.

POTT'S DISEASE AS ILLUSTRATING THE PRINCIPLES OF DIAGNOSIS. By C. E. WEBSTER, M.D.

Perhaps I more than others can appreciate the importance of early diagnosis in the disease under consideration, and as I walk the streets, I am well assured by many living proofs that in the past there has been negligence in this regard.

The busy general practitioner, with his mind harassed by a thousand cares, is liable to overlook the critical condition of some fretful, sickly child until the golden opportunity is lost, and he, the child, is burdened with the perpetual curse of an ineradicable deformity.

In order to present a paper of sufficient breadth of scope to be of general interest, I have incorporated the notes on Pott's Disease, which are for the most part compiled from standard authors, in an essay upon the subject of diagnosis. If this paper succeeds in awakening sluggish memories, and thus some *one* is saved by early treatment from lifelong misfortune, it will have well fulfilled its purpose.

The treatment of a case without a diagnosis is like waging war without a fortified base of operations. It can be done, and such cessfully, too, but it is not the highest refinement of art by any means. The most skilful physician, like the best trained general, may be forced into action without time for intrenchment, and if the odds are not too great against him, he may win the day. Uneducated doctors, like untaught savages, kill, take captive, and are victorious. The one protects his nakedness with a flimsy shield, and the other his ignorance with a fanciful diagnosis. But neither the success in emergency of the expert, or the prosperity of the quack, can justify departure in ordinary cases from the common course of procedure. Therefore it may be assumed that the recognition of the disease treated is the first requsite to successful practice.

Each disease has an individuality of its own, which is preserved through all its varieties and amid all its complexity of symptoms. Were this not the fact, scientific medicine would be impossible, for classification is the first necessity of exact science, and the identification of species is the first requisite to classification. Among diseases, species may be ill defined, may run into each other by innumerable varieties, or a particular case may present some startling anomaly; but strongly marked individual differences are not inconsistent with a specific resemblance, and the most hazy nebula has as real an entity as the most sharply defined planet.

Admitting the entity of a given disease, the question arises, in what does that entity consist? It is like the individuality of a face. Some faces have a characteristic feature; a nose, an eyebrow, a chin that is characteristic, and that face is remembered by that feature. So certain diseases have pathognomonic symptoms; as the periodicity of the attack in intermittent fever, and such diseases can be diagnosticated by their pathognomonic symptoms. In general, faces are remembered not by a process of analysis; not by their individual features, but as single units of cognition. You may know a person intimately, but cannot tell the exact shade of his hair or eyes, the shape of his nose, or the cut of his beard. Let him shave; let time furrow his face with wrinkles and pull out half his fading hair, you will still recognize him, though not a feature but has suffered some appreciable change.

It is the same with most diseases. It is often said of such and such a doctor, "he has a peculiar knack of diagnosis." In what does his peculiar excellence lie? He is old and little educated in the schools; his sight is dim, his hearing dull; he cannot appreciate fine points of auscultation and percussion. The Faradaic current is beyond his ken. He can hardly assign a reasonable cause for a single symptom, but he unconsciously coördinates those symptoms that he observes into a single unit of consciousness, giving each feature its due prominence in the picture drawn, and by taking a telescopic view of the case, and by comparing this with similar pictures of other cases that he has seen, he gives his diagnosis. His view is broad. He neglects much detail, but he sees the case as a whole. In general practice, it is this telescopic power of the mind that makes a diagnostician. There is more to diagnosis than this, however.

In common life, recognition of an individual is sufficient. In a court of law, identification becomes necessary. In ordinary practice, a snap diagnosis may be sufficient. In the scientific study of disease, in commencing treatment in a fatal or chronic malady, or in a formal consultation, an exact diagnosis is necessary. This may be reached by one of two methods—either directly, by comparing the symptoms of the case with the described

symptoms of the disease, or indirectly by the differential method, considering all possible maladies that might exist in the case, and eliminating them singly by the direct method, giving the preference to the residual disease.

To illustrate these principles, let us consider the early recognition of Pott's Disease.

A glance at the patient may be sufficient for the provisional or snap diagnosis. You see a sickly child with an anxious expression of face, moving cautiously, seeking support from external objects, and carrying its trunk erect. Throw some object on the floor for the child to pick up. It stoops by flexing the legs, but still carries the body erect and steady, as though the spine was made of glass, and it was afraid of breaking it. The seeking of support, and carefulness respecting jar or strain of spine, are the most distinctive features, and may be variously modified according to the age of the patient, the location and acuteness of the nflammation, and other circumstances of the case.

With the first glance you have recognized spinal caries, but in so serious a matter an opinion should not be given until the exact diagnosis is reached, which necessitates a history of the illness and a thorough examination. If unwilling to assume the responsibility, or unable from press of business to take the trouble, send the case to one who will, for you have before you for treatment a patient destined to live in spite of the grossest negligence, but whose future happiness and usefulness alike depend upon the care and fidelity of some one who for years shall enforce those simple rules of life, and adapt with care and accuracy the necessary appliances.

I can well assure you, gentlemen, that highway robbery were a much more honorable mode of obtaining wealth, than by careless diagnosis, procrastinating measures, or insufficient treatment, to rob a child of the slight chance of reaching that normal physical development, which is a prime requisite for maintaining his physical, mental and moral symmetry.

The history of the case will vary according to the variety of the disease. It is not intended to give a classification of these varieties, therefore it will suffice to mention all the symptoms

likely to occur, premising that the absence of symptoms, or the inversion of their order, does not preclude the possibility of spinal caries.

A prodromal period, or period of incubation, is to be expected. During this stage, which may date from some sickness or injury, or may arise without any assignable cause, and be of several months' duration, the patient shows an indifference to his ordinary amusements and an unnatural fretfulness. He may become awkward in his movements, stumbling in his gait, or assume unlikely attitudes. There may be constitutional symptoms, as loss of appetite, anæmia, and a rise of temperature. There may be nervous symptoms suggestive of paralysis, as weakness, numbness, or tingling sensations in the lower extremities, with irritability of the bladder. If the disease is high in the column, gastric irritation, with a sensation of constriction of the chest. If upper cervical, difficult deglutition, choreaic movements of muscles of the neck, numbness of the arms, and laryngeal cough, or a choking sensation.

Pain is one of the most unreliable of all the symptoms. It is generally located anywhere, rather than at the seat of the disease, and many patients are entirely free from it. It is thought to be caused by the irritation of the spinal nerves at the point of their exit from the foramina, and is referred to the ultimate termination of those nerves. When it occurs it may be constant, if local; intermittent, if remote from the spine; and be increased by fatigue or sudden jar. Acute pain is suggestive of a suppurative inflammation, while a dull ache is more characteristic of dry caries. The location of the pain indicates the location of the disease. If thoracic, the disease is cervical. If in the abdomen and lower part of thorax, the disease is thoracic. While if through the thighs, the disease is lumbar.

A satisfactory history of the case having been taken, the patient is to be stripped and inspected. Flexion of the spine is avoided, and a constant effort made by the patient to support himself. He leans upon the furniture, rests his hands on his thighs, or lies across some object. His movements are constrained in order to avoid jar. He shuffles in his gait. From reflex muscular spasm there may be a partial flexure of the thighs, and a

local stiffening in the portion of the spine affected. Torticollis may occur. The head may be thrown back, and the shoulders raised. The respiration may be grunting in character, with limited motion of some of the ribs. The first evidence of the location of the disease visible to the eye may be a slight flattening of the normal curves of the spine, with stiffening of the affected part, an indication of little value in young children when the curves are not developed. There may be a slight bulging, or a slight lateral angle in the line of the spinous processes at the diseased point, and finally, as the commencement of the deformity, there is the formation of a knuckle produced by the tilting up of the spine of the vertebra whose body is most eroded.

Follow the inspection by a physical examination to establish the diagnosis and locate the disease. Let the patient jump down from a slight elevation, as a low stool. This concussion may produce a cry of pain, a slight confusion of ideas, the child looking surprised, or even a fall. Another method of producing the same result is to press down on the head and shoulders, producing a cry and muscular spasm. These are both rather dangerous experiments. Rubbing the back briskly with the knuckles makes the vetebral spines stand out in red spots. This may assist in detecting any displacement. Pain may be produced at the point of disease by percussion, firm pressure, compression of the chest, crowding the heads of the ribs against the diseased vertebra, a piece of ice or a thimblefnl of hot water passed down the back; and lastly, by lateral flexion of the spine, the patient lying on his face, and the body being grasped by the pelvis and shoulders. If, with the patient standing erect, the palm of the hand be placed against the suspected region, and then the spine bent in various directions, any local stiffening can be detected, the neighboring healthy parts being felt to move. The heat of the inflammation can sometimes be detected by the hand or by the surface thermometer. There may also slight diffuse swelling. If the patient has pain of any sort, impeded respiration, or any uncomfortable sensation, lay him across the knees, on a table, or place him in a spiral swing and make firm gentle extension or partial suspension. Observe if his symptoms are relieved. If he gives a sigh of relief and breathes freely while there is a cessation of

his pain, and if the reverse of these maneuvers, by pressing the diseased bones more closely together, aggravates his symptoms, the diagnosis may be considered as fully established, and a plan of treatment adopted.

There are cases where the first symptom noticed is the knuckle of the commencing deformity, and others where paraplegia or abscess may occur without deformity. In obscure cases where the direct diagnosis is difficult, or in any case where especial accuracy is desired, the following table for differental diagnosis will be of service. Error is case of some of the diseases mentioned is much too common, and an occasional reference to such a table, though it be far from exhaustive, will be a valuable aid to the memory:

TABLE FOR THE DIFFERENTIATION OF POTT'S DISEASE.

	POTT'S DISEASE.	STRAIN OR CELLULITIS.	HYSTERICAL SPINE.	MUSCULAR RHEUMATISM.	COXARUM MORBUS.
Prodromic stage	May be months in duration.	Absent.	Absent.	Absent.	Months in duration.
Motions and attitudes	Suggest anxiety to keep the back from hurt.	Show a stiff back.	Natural.	Not characteristic.	Suggest trouble in one leg.
Pain intermittent	Remote from spine.	From motion with local tenderness.	Very sensitive at a few points to a light touch.	Not local, at one point.	In leg.
Pain constant	In the spine increased by pressure.	Increased by pressure.	Patient writhing in pain.	Motion painful.	In leg.
Stiffness	Local.	Local.	Absent.	Absent.	Of hip.
Jar and pressure	Aggravate symptoms.	No effect.	Give varying results.	Negative.	Aggravate symptoms.
Extension	Relieves symptoms.	No effect.	No effect.	Negative.	Relieves symptoms.
Early deformity	Angular.	Absent.	Absent.	Negative.	Lengthening of leg.
Paraplegia	After deformity.	Absent.	Hysterical.	Negative.	Absent.
Tumor	From abscess.	From abscess.	Absent.	Negative.	From abscess.

Sacro-Iliac Disease.—Resembles hip disease.

Torticollis.—If from cervical caries the patient supports the head with hand. Palpation detects thickening and tenderness of vertebra.

Superficial Caries.—Constitutional or traumatic causes, abscess, no deformity.

Aneurism of Aorta.—Deformity slight, not angular, signs of aneurism.

(Other Tumors.—Either inter-thoracic or abdominal; deformity not angular; physical diagnosis of tumor.—Dr. E. W. Andrews).

Disease of Kidney.—Differentiate by the urine.

Lateral Curvature.—Deformity not angular; no stiffness.

Rachitis.—Deformity not angular; affects other portions than the spine.

Muscular Weakness.—Deformity obliterated by lying down.

Hernia.—Sudden disappearance of tumor, with absence of spinal symptoms.

Paraplegia.—Without deformity may be ascribed to Pott's Disease if there are spinal symptoms and no other assignable cause.

Diseases of Childhood.—With a long prodromal stage are to be differentiated by the concomitant symptoms. (Acute, with local pain, to be differentiated by the concomitant symptoms and the results of treatment.—Dr. Graham).

Authorities.—Bauer, Brodie, Paget, Sager, Shaffer, Shaw, Taylor, and others.

Theories of treatment and facts of general science can be stored in text-books; they may be held in memory, or, when needed, sought by reference, as is most convenient; but it is the duty of the student, ere he becomes a practitioner, to become at least tolerably expert in the snap diagnosis of common diseases, if not invincible in exact diagnosis.

How are these powers to be acquired? By only one process—by the study of disease; by noting the gross appearance of disease as well as its most minute features; by clinical practice, supplemented by careful reading, and by acquiring the greatest possible proficiency in all those methods of physical exploration, without which scientific medicine would be an impossibility. Many a young graduate enters the sick-room of his first patient with trembling and abject fear. He has learned to auscultate and percuss with an instructor at his elbow, and to listen by the bedside in the hospital to an exact description of a patient's symptoms, but to interrogate and examine a patient with a view to identifying his disease and relieving his sufferings, is a thing to him as strange as were mounted horsemen to the American aborigines.

At the commencement of one's course, if he could learn the practical duties of a nurse and accustom himself to attendance on the sick, he would have done far better preliminary work than if he had mastered every department of natural science, for then the clinic would be real practice, the didactic lecture an illumination of intelligible pictures and not a weird phantasmagoria of the

unreal. While the work of pathology would become the survey of old battle fields, the study of the historic part which is to fit him for coming victories,

In conclusion, let me quote my honored teacher in anatomy, Dr. Oliver Wendell Holmes, who, from the eminence attained by a life of philosophical labor, sends down this clue to guide the student groping among the underbrush of routine study: "I would not undervalue the branch I teach. I recognize the incidental importance of all the subsidiary branches which form a part of the curriculum of this and other schools. Do full justice to these, or you will not, probably, do justice to your more immediately practical studies. But your hardest study must be at the bedside. To go hastily from the library of old books and the laboratory of new experiments to the bedside of disease, is imitating the presumption of those rash profligates who, as Thomas Barton says, think they can take a 'leap out of Delilah's lap into Abraham's bosom.'"

Article III.

Irregular or Hour-Glass Contraction of the Uterus.

By E. S. McKee, M.D., Late Clinical Assistant to the Hospital for Sick Children, Great Ormond street, London, England; Assistant Physician to St. Mary's Hospital; Assistant in the Gynæcological Clinic, and Adjunct Lecturer on Gynæcology, Medical College of Ohio, Cincinnati.

My attention was recently directed to this subject by the following case:

I was called October 8, 1883, to see Mrs. W., No. 20 Gano street, a strong, healthy colored woman, aged 35, married seventeen years, a septipara.

She had, four hours previously, been delivered of a fœtus quinquimestris, under the charge of a midwife, who said: "The afterbirth did not come away very quick, so I pulled on the navel string, and it broke; then gave a dose of ergot; waited an hour. It did not come, so I gave another dose; still it did not

come, so I thought I had better send for a doctor." The woman had no after pains, nor had she had any of consequence since the delivery. On vaginal examination, I found the pelvis normal, the vagina considerably elongated, so that it was difficult to reach the cervix.

The os was patulous, and the cervix flaccid. Passing my finger on up through the cervix, I met with a constriction about the region of the os internum; and placing my other hand over the abdomen, I found the fundus above the umbilicus, high up, hard and firm. After some difficulty I found what I considered a constriction about the middle of the uterus, the upper and lower parts being equal. Fixing the fundus uteri firmly in the palm of my external hand, I forced the index finger of the other through the stricture and felt the placenta, though there was no trace of the cord, it being extracted stump and roots. The midwife had pulled too hard at the bell-rope, and it came away, leaving only the bell behind.

I tried faithfully for a considerable period to get my hand or fingers behind the placenta, but owing to the highness of the uterus and the firmness of the constriction I toiled vainly, utterly unable to accomplish more than to jog the terminal phalanx into the placenta. There having been no unusual hæmorrhage, nor any indications of such, and the woman suffering only from the pain incident upon my efforts to extract the placenta, I gave her $\frac{1}{4}$ gr. morphia, and returned to my office near by, leaving instructions to be sent for if anything should happen. At 12 midnight, three hours later, I saw her again. She had been sleeping quietly ever since my departure, and had been hoping that I would not return to hurt her more. Again for the space of half an hour I worked, with the fundus in one hand, the other trying to gain entrance through the stricture. Here, as before, I tried dilatation with the fingers, separating them as one would a pair of shears, but neither tact nor force were equal to the situation. The afterbirth had been in utero now more than eight hours, so I resolved that it must come out. Having put the woman thoroughly under the influence of chloroform, I again went up into the womb. This time I found the stricture some-

what relaxed, though still there. Being free from the evasive, squirming movements of the woman, caused by the pain I gave her, I succeeded in getting my hand into the cavity of the uterus, and in removing a portion of the placenta without great difficulty. The remainder, however, I found firmly adherent to the uterine wall, and it was with considerable effort that I succeeded in removing it. A small portion I found to be so firmly attached, that I thought it inadvisable to use the amount of force required to remove, and reluctantly left it behind. But a slight amount of blood came away. I left the woman sleeping quietly from the effects of the chloroform.

On the morning following I visited her, and found her feeling all right, with the exception of some soreness from my manipulations. Temperature normal. As a precautionary measure, I gave her an intra-uterine injection of carbolized water, 1 in 40. This was continued, and the case kept under observation for six days. There having been not one untoward symptom, it was dismissed. The hygienic surroundings were miserable, and the easy recovery to me a great surprise.

Synonyms.—Hour-glass contraction of the uterus, probably better termed irregular contraction of the uterus, also stricture of the uterus, encystment, incasement, or inclusion of the placenta, or hernia of the after-birth, is called by the French *chatonnement enchatonnement*, and by the Germans *mutterkrampf* or *uterus strictur*. The term hour-glass contraction, which has been so long in vogue, has been discarded by a number of obstetricians. One of them claims: "There is, in my opinion, no such thing as hour-glass contraction. One finds no such thing as the contraction of the transverse zone of fibers represented in the diagrams in the books handed down by tradition, and accepted without dissent by the later authors."

While irregular contraction is a more general term, yet I must maintain that to a few cases, probably a very few, the old time-honored term, "hour-glass contraction" describes the situation more accurately than any other. It is true that the cavities may not be exactly equal, and that the "sand" may remain in the upper cavity more than an "hour," in fact sometimes making it an "all day glass," or, possibly, an "eight day glass." Yet

it is as good as the average medical simile. Better than "pelvis," for who ever heard of a basin without a bottom. There have been too many carefully recorded cases by too many careful,able, and honest observers, to throw the term aside lightly, as being without foundation in fact.

Varieties.—M. Stolz, of Strassburg, an extensive writer on this subject, has described four distinct varieties, viz.:

I. A spasmodic contraction of the os tincæ.

II. That of its internal orifice.

III. That of one or more portions of the body of the uterus.

IV. A spasmodic contraction of the whole body of the womb.

Many authorities deny the presence of the first variety on account of the flaccidity of the cervix uteri after the birth of the child. They also think that if it did occur, it would be of short duration.

According to M Guillemot, the second variety is the true hour-glass contraction. He says: On introducing the hand, the cervix is found projecting into the vagina disfigured, so as to resemble a large intestine. Above this five or six inches, is found the wrinkled and contracted orifice. The cavity of the uterus containing the placenta is found above the contracted part with the uterine walls, in some instances, firmly contracted around the placenta, in others, in a state of complete or partial inertia. In general, the upper portion of the uterus is contracted on the placenta, then that portion seems to be no larger than that below, which often leads to the error that the contraction is in the middle of the uterus, that is, above the os internum. In the majority of cases, the placenta is found in the upper portion of the uterus, but in some it is found strangulated in the stricture—one part in the upper cavity, the other in the lower. This constriction of the placenta by the constriction of the uterus may leave a small, a half, or a major portion below the stricture. As for the third variety, it is claimed that the uterus contracts accurately on a body within its cavity, hence on the placenta. Thus, where the walls meet with no resistance from the placenta, as off its borders, they come together, and we have inclusion of the placenta, which may be incasement or encystment. In encystment, the placenta is imprisoned on all sides by the walls of the

uterus. In incasement, the uterine walls contract on the circumference of the placenta and form a collar or frame. This variety may be partial or complete.

The fourth variety is fully explained by its name, and has been written up by Stolz.

Frequency.—Collins* reports from the Rotunda Hospital in Dublin, 66 cases of retention of the placenta requiring the introduction of the hand. Nineteen of these were from irregular action; 6 out of the 66 died, each of the six had retained placenta from irregular action.

Burns says: "In almost every instance this contraction took place where there was flooding. He scarcely ever introduced his hand into the uterus without meeting with it, whether the placenta had or had not been expelled."

Robertson says: "In all my practice, consisting of upwards of 1,200 cases, I have never met with a case resembling hour-glass contraction. I have been called several times by my professional brethren where the placenta has been incarcerated in the uterus and os closed."

Campbell says: "I never met with an hour-glass contraction, and think it very rare, or does not exist at all."

Braun says: "Abnormal adhesion and hour-glass contraction are more frequently encountered in the experience of the young practitioner, and they diminish in frequency in direct ratio to increasing years."

The ante-partum variety of the hour-glass contraction is even more rare than that which occurs post-partum. This rarity is demonstrated by the fact of its almost entire absence from the text-books. Dr. Baltzell, who has the credit of having recorded the first case, says: I have never read, heard of, nor met with a similar case in the course of my obstetric practice." Prof. Reamy, my honored teacher, concludes the excellent report of his cases as follows: "Its rarity may be seen by reference to the fact that not a case occurs, as far as I am aware, in the reports of either the London or Guy's hospitals since the foundation of these charities." Stiles reports that he had never heard of it,

* For references see Bibliography.

nor was he able to find any one among his neighbors (Leavenworth, Kansas) who had seen or heard of it. It is claimed by some to occur more frequently in twin pregnancies than single births.

Dr. T. C. Smith, in an admirable article, records 30 cases of ante-partum hour-glass contraction, and mentions three others as doubtful cases. Since the table was published, I have been able to find four * other such cases, making 34 in all, with three doubtful cases.

Ætiology.—The use of the cord as a bell rope or fishing line with which to draw out the placenta. This pulling and hauling at the cord results in its separation if there is much resistance, or in the production of spasmodic contraction of the whole or portions of the uterus by the movements of the cord upon it.

The same may result from the introduction of the hands or instruments of the accoucheur, especially if they be cold, or some other irritation of the uterine muscles. We must conclude from the data furnished us, that a disproportion between the presenting part of the child and the pelvis of the mother must be a cause. It retards labor and gives more opportunity for the spasm. It also elongates the cervix, thus expending the longitudinal force of the uterine contraction. Other causes may be, sudden emptying of the uterus, as in precipitate labor; after tedious labor, the uterus being exhausted and incapable of regular contraction; following the improper use of ergot of rye; after the birth of twins, or where there was present a large amount of liquor amnii, and great distension of the uterus; premature evacuation of the liquor amnii. According to Stolz, the disposition exists in the organ. Simpson mentioned as a cause the prolongation of the first stage. Simpson thought it caused by the effort of the womb to recover the normal state. Levret thought that that part of the womb which corresponded to the placenta remained in a state of inertia, the other parts contracting. Plessman thought those

* Prof. Reamy, during the writing of this article, in delivering a woman before the class in the Medical College of Ohio, met with an ante-partum hour-glass contraction involving the internal os. It was ten hours in duration, and necessitated the use of the forceps. He had delivered the same woman before the class on a former occasion, and was obliged to do the high forceps operation. The woman is æt. 32 a quart-ipara, and has a conjugate diameter of only 3¾ inches. The mother and child both survived.

parts of the womb which press directly on the child are more highly irritated than those which press on the placenta, hence they contract sooner. Peu thought it due to a peculiar conformation of the uterus; Leroux and Kok, that it depended on the rupture of the nerve filaments. In a woman who died at the Hospice de l'École, Velpeau found the uterus moulded upon the placenta so that it was divided into five shallow cells which evidently depended on protuberances formed by the corresponding cotyledons of the afterbirth. Baudelocque claimed that hour-glass contraction was caused by that portion of the uterus which was around the child's neck being only momentarily distended by the passage of the child, and then again contracting. Meigs, Douglas and Ramsbotham count placental adhesion as the principal factor in the hour-glass contraction. Ramsbotham says adhesions of placenta occur more frequently among the lower classes, because occasioned often by a blow or injury received during gestation, hence we may look for hour-glass contraction oftener among them. Meigs says the placenta acts as an antagonist to that part of the womb on which it rests. That part below has no antagonist, and it contracts and shuts the placenta in. He says further: "I have never yet met with a case of hour-glass contraction in which I was not compelled to separate the placenta with my hand. I cannot well conceive of an hour-glass contraction independent of preternatural adhesions of the afterbirth to the womb."

Dr. Douglass says "the placenta is always found adherent to the uterus."

"Duncan says: "Hour-glass contraction cannot exist unless the parts above the constriction are in a state of inertia; were the higher parts of the uterus in moderate action, hour-glass contraction would soon be overcome."

Nicholls observed the frequent occurrence of difficult labors among the wives of Irish peasants who were compelled to endure great physical labor. They were obliged to carry on their backs in creeds turf from the bog, manure from their cabins to the fields, and stones from the fields to be broken for road-making. With those heavy burdens they are obliged to stoop forward,

causing the abdomen and uterus to become more prominent than normal. He observed in these cases a partial suspension of labor, the gradual escape of the liquor amnii, the uterus narrowed and lengthened, so as to assume a long oval shape rather than a globular one, and subsequent hour-glass contraction. "After seven years meditation" he fortunately "hit it off." He arrived at the conclusion that the child's head forced the cervix uteri against the pubic arch, arresting the descent of the uterus and the dilatation of the os. By and by the waters began to escape, and the uterus, unable to contract longitudinally, contracted in its circumference on the body of the child. The legs then became extended, and the uterus moulded itself on to the body. Hour-glass contraction and retention of the placenta followed.

Scanzoni thought, "because of the rich nervous supply to the uterine fibers of the os internum, it is irritated by the advancing head, and spasm occurs."

Macdonald gives as a cause in his case, a neurosis affecting the parts, due probably to the fact that the patient was an epileptic. In fact, something analogous to a vaginismus.

Prof. Heile has demonstrated the existence of bundles of fibers running obliquely from either side of the body, anteriorly and posteriorly to the fundus. He says that spasmodic contraction of the fibers would divide the uterus into two compartments, one of them being the infundibulum, the other the remainder of the cavity. This being the case, the possibility presents itself of the arrangement of uterine fibers not being the same in all uteri; *i. e.*, the existence in some of circular fibers.

Lusk says "a special reinforcement of the muscular fibers around the internal orifice of the cervix, constituting the so-called sphincter, is admitted by most anatomists."

Briggs, in a most complete and excellent article, goes thoroughly into the anatomy of the internal os and the causation of hour-glass contraction, more especially the ante-partum variety. He says the wound consists of three bands of muscular fibers, a longitudinal, a transverse, and an oblique, intimately combined with connective tissue and elastic fibers. The transverse or circular fibers aggregate at or about the internal os, and form a

sphincter. To them we must look for the efficient factor for the deformity in question.

Curten, in a Cæsarean section performed by himself, saw a sulcus transversus come and go in the uterus. This sulcus on the external surface was evidently due to contraction of bundles of transverse fibers in the middle of the body, for after the uterine incision had been closed there was noticed an irregular gaping of its edges at the time of the formation of the transverse groove. A spasmodic contraction of the uterus that could have produced this shallow furrow, could have undoubtedly produced a marked hour-glass contraction of the body of the uterus. There was no abnormal alteration of the tissue of the uterus.

The views of Bandl, "that during the latter months of pregnancy a new cervix uteri is formed, composed of the segment of the uterus, the upper part of the vagina, and the cervix uteri proper," which were presented to the German congress of physicians in 1876, have not been confirmed by others. On the contrary, they have been controverted by many distinguished investigators. He did not find a single supporter to his theories in the association where they were promulgated. Müller did not accept them, and Macdonald, in his unanswerable logic and array of facts, has since completely wrecked the whole idea. Others from all parts of the medical world have risen up to proclaim him in error.

I regret to mention this, for to the author of this theory I owe much of what little I know of gynæcology, having been with him in the Poliklinik at Vienna, and a witness to his skill as a clinical observer.

Diagnosis.—The placenta not coming down as it should after the delivery of the child, if traction on the cord is employed it is found that it does not descend, but instead it lengthens from elasticity, immediately retracting on release. This shows that it is made fast above. Should this traction be continued, rupture is the consequence. If the hand is passed along the cord, the examiner will, in the true hour-glass contraction, find the external os patulous and flaccid, often distorted, readily admitting the finger up to the internal os, where he meets an obstruction, com-

plete or nearly so, to further progress. There is, possibly, a large or small part of the placenta below the constriction, or it can be felt by the finger tip above the stricture. It may be distinguished from the uterine walls by the vascular ramifications, the softer feel, the elevation above the walls of the uterus, the (to the patient) duller sense of the accoucheur's touch upon it, in comparison with that upon the uterine walls, and from bimanual examination the increased thickness.

Internally one feels that part of the uterus above the constriction hard and firm. This also can be felt externally, and in many instances the constricting band can be made out. The uterus is high up in the pelvic cavity, and elongated, its transverse diameter being diminished, contraction rarely occurs at the external os, and may occur at any other portion of the uterus.

Pains and flooding are usually absent. As an additional means of diagnosis, the writer would urge upon the profession the importance of abdominal palpation. When an hour-glass contraction exists, an expert diagnostician should be able to make it out through the abdominal walls; as aids in this department are recommended: "The Diagnosis and Treatment of Obstetrical Cases by External (abdominal) Examination and Manipulation," and "Minor Surgical Gynæcology," both the authorship of Paul F. Mundé. Not only should the sulcus be detected by external manipulation, but also whether the uterus is contracting in the normal globular form or in the long, oval condition, betokening hour-glass contraction, In case of retained placenta, a bulging at that part of the uterus containing the placenta is palpable. Pains seem to have little or no effect. Pains in the sacral region and in the neighboring organs, the bladder and intestines, colic, tenesmus, and nausea occur. Should all other means of diagnosis fail, let the practitioner get his hand within the spasmodic grasp of the uterus, and he will think he has met an old classmate. The grip is terrific. Dr. Reamy says: "I willingly withdrew my hand, so painful was the grasp. If the constriction had surrounded the neck of the child, it could not have survived longer than if it had been suspended with a noose around the neck."

Dr. Nichols: "On very many occasions my hands have been

nearly powerless for days from the long and severe pressure they were subject to in overcoming hour-glass contraction."

Prognosis.—In this statistics do not come much to our aid and we do not know much about it. One cannot easily prognosticate the result when nature clouds her future in such doubtful dimness. In the 33 labors in 30 women, where ante-partum hour-glass contraction occurred, reported by Smith, we find the appalling mortality of 8 mothers and 28 children; 3 mothers died undelivered; only 7 were stated as primiparæ. Of those who died, 4 were primiparæ. In one case the mother had gone through 13 deliveries.

Treatment.—First, remove the spasmodic contraction, then remove the placenta if retained. Time alone will sometimes remove the constriction, though it may permit its increase.

If there are no contra-indicating complications, as hæmorrhage or lapse of time, one may simply wait. After 6 or 8 hours have elapsed, however, it is better to commence active measures. Frictions on the fundus uteri are often effective. One may try to dilate the constricted orifice by inserting two fingers and opening them as a pair of shears, and by firm, steady and continued, yet slight, force overcome the spasm, or, as it were, wear it out. As a preparatory measure, the fingers may be smeared with unguentum belladonnæ. Simpson recommended chloroform, which is much in use in Scotland. King asserts that it is not affected by anæsthetics. In attempting to introduce the hand into the uterus, it should be placed in the most insinuating position in the shape of a cone. Opiates, decoctions of belladonna and hyosciamus are recommended.

Dr. Fancourt Barnes recommends inhalations of three drops of nitrate of amyl on a handkerchief. He has obtained excellent results. Dr. Richardson recommends amyl nitrate gtt. iii., ether ʒi; inhale. Does not produce unconsciousness, but has an opposing force to ergot. In it we have the designated epichontocic agent. Johnson has had flattering results follow hypodermic injections of belladonna, but it failed him once. A solution of tartrate of antimony given in $\frac{1}{6}$ to $\frac{1}{4}$ gr. doses, and repeated every hour or oftener until the patient becomes quite sick and prostrated, has been long in use and very effective, but is

contraindicated in some cases. Fränkel recommends subcutaneous injections of muriate of morphia from 0.015—0.003 grm.; atropia sulph., 1 milligramme. Warm fomentations and irritations to the abdomen; sinapisms, turpentine stupes on hypogastric region; venesection when patient is plethoric; and warm baths. The upright position is favorable in the ante-partum variety. Ramsbotham objects to large doses of opium, saying that they may so paralyze the uterus that it will not again contract. Warm baths are objectionable in that they may induce hæmorrhage which might not be readily detected. If a small part of the placenta is below the constriction, it should be pushed up and the uterine cavity then penetrated with the hand. If strangulated near the middle, one should pass the hand up and secure the part above. If the major portion is below the constriction, this should be compressed, thus lessening that above and favoring delivery. To remove adherent parts of the placenta: It is claimed that traction on the cord is sometimes good practice if it can be made perpendicular to the plane of attachment, not horizontal. The simile is the separation of two wet sheets of paper. The separation with the hand should be done by running the finger along as one would tear the uncut leaves of a new journal. Very tightly adherent pieces of placenta may be loosened by a scratching motion of the ends of the fingers. Do not, however, be too eager to remove every bit. Several cases are on record of a fatal result from a too forcible removal of portions of placenta. One may start the detachment of a plate of the inner muscles of the uterus, which, becoming deeper and deeper, may finally lead into the peritonæum, and the usual results follow. The dangers of allowing a portion of the placenta to remain are great, those of forcible detachment are greater. M. Dubroca, of Bordeaux, has introduced a new method, the method of erosion. When it is difficult to induce the dilatation of the stricture, he introduces one finger into the placenta, tearing it up and reducing it to fragments, which are afterwards expelled. He has found this plan useful in cases in which he could not introduce the finger. One may inject cold water into the placenta, through the umbilical vein, with considerable force. This is retained a few moments by compression of the cord, then

released, and the injection repeated. This has an effect both on the placenta and the uterus. If everything else fails, incisions through the structure should be made. Be sure to go sufficiently deep. Better too deep than many shallow cuts. It should be made with long blunt fistula shears. The buttoned bistoury easily cuts the walls of the vagina. Cæsarean section has been seriously discussed as being a resort in the ante-partum variety.

As prophylactic treatment. Avoid every cause liable to irritate the uterus. When antepartal, avoid a too early rupture of the membranes.

2. As far as possible remove all impediments to the expulsion of the child from the uterus.

3. Assist with the forceps, or by turning before the cervix becomes excessive.

After a careful perusal of the above, my readers, I think, will agree with me in the following conclusions:

1. That the good old-fashioned hour-glass contraction, "handed down by tradition," and the writings of many of the best obstetrical observers the world ever saw, still lives. That its occurrence is much more rare than is generally supposed. That the case mentioned in the beginning of this article was one of these rarities.

2. That its occurrence ante-partum, adds greatly to the dangers incident to the mother and child in the parturient act. That this danger on the part of the mother is but slightly lessened in the post-partum variety.

3. The sulcus uteri, caused by the contraction, being diagnosticable, in many cases, through the abdominal wall, practitioners should resort more frequently to this mode of diagnosis.

4. Thinning of the segment of the uterus below the stricture is the exception, flaccidity being the rule.

5. That hypotheses based upon assumed anatomical structure of the uterus and cervix are, at this time, not entitled to the weight of authority. There is a lack of harmony in the opinions of anatomists regarding them. They are unsupported by clinical observations. *Hic jacet* the view of Bandl:

6. A treatment applicable to all cases, owing to the many and varied peculiarities attendant upon each, is at present impractic-

able, and each case must be treated until we are further informed, *p. r. n.*

6. Owing to the disheartening mortality in the ante-partum variety, the Cæsarean section is worthy of serious consideration and use, as a means of safety to mother and child, especially the latter.

BIBLIOGRAPHY.

Bandl, Ludwig—Ueber Rupture der Gebärmutter und Ihre Mechanic. Wien., 1875; also, Condition of the Uterus and Cervix during Pregnancy and Labor. Schmidt's Jahrbücher, No. 4, 1878, and. *Am. Jour. Obstet.*, July, 1878, and, Gynæcological Sec. German Congress of Physicians, Sept., 1878.

Barnes, Fancourt — Hour-Glass Contraction of the Uterus Treated by Nitrite of Amyl. *Brit. Med. Jour.*, Lond. 1882, I, p. 377; also *Med. and Surg. Reporter*, Phila., 1882, Vol. xlvii, p. 44; also *Obst. Gaz.*, Cin., vol. v, p. 205, 1882.

Baudelocque—Heath's Trans., vol. ii, p. 969.

Blundell—Obstetrics, pp. 166, 623-625. 1840.

Baltzell, J. —Ante-Partum Hour-Glass Contraction. *Am. Jour. Obst.*, 1882, vol. iv, pp. 300–302: also *Am. Med. Recorder*, Phila., vol. iv, 1821.

Burns—Midwifery, 5th ed., p. 485.

Bradley, J.—Hour-Glass Contraction of the Uterus. Detroit *Lancet*, 1879. N. S. ii, pp. 95–101.

Briggs, W. A.—A Case of Ante-Partum Hour-Glass Contraction of the Uterus, with Remarks. *Pacific Med. and Surg. Jour.* San Francisco, 1878-'9, xxi, 337–350, discussion of, 398–401; also *Am. Jour. Obst.*, xv, p. 309, 1882.

Bourneville and Vaulet—De la Contracture Hystérique Permanente. Paris, 1882.

Bradley, W. L.—Ante-Partum Hour-Glass Contraction of the Uterus. *Med. Rec.*, N. Y., 1882, xxi, p. 569.

Caulkins, J. S.—Some Remarks on Hour-Glass Contraction of the Uterus. Tr. Michigan Med. Soc., Lansing, 1879, ii, pt. 3, p. 393.

Cazeaux. Midwifery. 1870, pp. 870–879.

Charcot—De la Contracture Hystérique; Rev. phot. dé Hôp. Par. 1871, xliv, pp. 557, 561. Théorie de la Contracture Spasmodique Permanente. Ibid, 1879, i, 11, 1132–1154.

Chapman—*Med. Gaz.*, vol. vi, p. 400.

Campbell—System Midwifery, p. 205.

Collins—Midwifery. 1878, pp. 74, 75, 94.

Cook, W. C.—Spontaneous Version, Hour-Glass Contraction, Evisceration. Tr. Med. Soc. State of Tennessee. Nashville. 140.

Chatellin, H.—Enchattonnement incompléte du placenta; delivérance artificielle précoce; guérison. *France Méd.* Paris, 1882, iii, 373–377.

Church, Wm. H—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv., p. 314. 1882. *Am. Med. Times*, N. Y., 1861.

Crist, D. L.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv. p. 305, 1882. Also Chicago Med. Jour. and Exam., 1866, vol. iii.

Curtin, R. G.—Observation of Sulcus Uteri Transversus in Cæsarean Section. *Am. Jour. Obst.*, N. Y. 1880, xiii, p. 397.

Dewees—Midwifery, 1826. pp. 495–507.

Douglass—Observations Hour-Glass Contraction. 1820. p. 10. Trans. Royal Coll. Phys., vol. vi., p. 393.

Davis, H. G.—Ante-Partum Hour-Glass Contraction. *Am. Jour. Obst.*, xv, 312. 1882. Phila. *Med and Surg. Rep.*, xiv, p. 484, and xxx, p. 115.

Dudley, Benj.—Lond. *Med. Gaz.*, July, 1848, from Schmidt's Jahrbücher, lxiv, p. 37. 1849.

Duncan, J. M.—Researches in Obstetrics, p. 389.

Elliott, Geo. F.—Ante-Partum Hour-Glass Contraction of the Uterus; three cases. *Am. Jour. Obst.*, xv, p. 309, 1802; also Obstetric Clinic, p. 188, 1858, chap. vii.

Fränkel—Ueber eine neue Behandlungs Methode spastisches Uterus Stricture in der Austreibungs und Nachgeburts Periode. Tagbl. D. Natur Versaul. zu Breslau 1874. Abs. *Arch. für Gynœcol.* viii, 1875, S. 375.

Fosdick, A. C.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, iv, p. 311. 1882. Cin. *Obst. Gaz.*, iii, p. 121. 1880.

Gay—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, p. 302, 1882; also Proceedings of the Buffalo Medical and Surgical Association, Buffalo *Med. and Surg Jour.* 1870–'71, ix, p. 218.

Goelet, A. H.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am Jour. Obst.*, xv, p. 313, 1882; also N. Carolina *Med. Jour.*, 1878.

Goodyear, Miles D.—Ante-Partum Hour-Glass Contraction. *Med. and Surg. Rep.*, xxxiv, p. 104. 1876.

Hamilton—Obstetrics, 1840, p. 178.

Holbrook—*Med. Gaz.*, vol. vi, p. 101.

Hergott—Enchatonnément du Placenta; mort de la malade détails importantes révéles par l'autopsie. Rev. Méd. de l'Est, Nancy, 1882, xiv, pp. 4–15.

Harris, R. P.—Irregular Contractions in Twin Births. *Am. Jour. Obst.*, 1880, xiii, p. 399; Abs. Playfair's Midwifery, p. 412. 1880.

Heile. Recherches sur la Desposition des fibers musculaires d'l'utérus, and *Am. Jour. Obst.*, xiii, p. 397, 1880, and vol. xv, p. 319. 1882.

Haines, G. A.—A Case of Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, N. Y., xv, p. 696. 1882.

Hobbs, H. G.—An Encapsulated Placenta, Twins Extracted from U. five hrs. after Parturition. *Southern Medical Record*, Atlanta, ix, pp. 284–286. 1879.

Hosmer — Hour-Glass Contraction of the Uterus. *Boston Medical and Surgical Journal*, March 21, and May 30, 1878; also *Am. Jour. Obst.*, xv, 1882, p. 307.

Johnson, Wm.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv, p. 312, 1882; also Ante-Partum Hour-Glass Contraction Suspected by Abdominal Palpation. *Am. Jour. Obst.*, pp. 34, 61, xv, 1882. Phila. *Med. and Surg. Rep.*, i, 284.

Jordan, H.—Unage Tr ponadie szezrmasie chorót potogonych pomidezy luduoscia zydonska w. Krakowich (Hour-Glass Con-

traction in Jewish Women in Cracow). Przegl. lek. Krakow, 1881, xx, 101, 136.

Krause—Geburtshülfe, p. 531. 1853.

Kuestner, Otto—Contributions to the Anatomy of the Cervix Uteri during Gestation and Parturition. *Archiv. für Gynœcol.* xiii, 3; also Abstract in *Am. Jour. Obst.*, xi, p. 646, 1878.

King—Manual of Obstetrics, pp. 225–228, 257. 1882.

Leishman—Midwifery, p. 405.

Lusk—Midwifery, N. Y., p. 429. 1882; *Am. Jour. Obst.*, p. 595, xi, 1878.

Lange—Geburtshülfe, p. 762. 1825.

Lee, C. C.—Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, N. Y., 1880, xiii, p. 594. 1880.

Lee, Robert—Midwifery, pp. 405–408. 1844.

McGarven, N.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv, p. 305, 1882, also *Montreal Med-Chronicle*, vi, 1859.

Mason, E.—Ante-Partum Hour-Glass Contraction of the Uter. us. *Am. Jour. Obst.*, iv, p. 311, 1882. *Atlanta Med. and Surgical Jour.*, iii, 389, 1875.

Morrison—Case of so-called Hour-Glass Contraction of the Uterus in Case of Twins, interfering with the Delivery of the second Child. *Indiana Med. Jour.*, Indianapolis, i, p. 166, 1872-3.

Meadows—Manual of Midwifery.

Meigs—Obstetrics, pp. 299–302–392–393, 1849.

Moss—*Med. Gaz.*, vol. vi, p. 172.

Macdonald, A.—Note of Case of Spasmodic Contraction of Lower Segment of Uterus during the first Stage of Labor. *Edinburgh Med. Jour.*, xxiv, pp. 913–919, 1878-9; also *Obst. Jour-Gt. Britain*, London, 1879–80, vii, pp. 397–405.

Mithau, Francois—*Essai Sur l'enchatonnement du Placenta. Montpiel*, No. 17, p. 51, 1882.

Moore, J. A.—Hour-Glass Contraction of the Uterus upon a dead child. *Obst. Gazette*, v, page 123, 1882.

Moore, J. A.—Hour-Glass Contraction of the Uterus previous to Delivery of the Child. *Chicago Med. Jour. and Examiner*, xi, pp. 253, 256, 1880; also Tras. Obst. Soc. Phila., (1879), 1880,

p. 592; also *Am. Jour. Obst.*, xv, p. 306, 1882, Discussion *Am. Jour. Obst.*, N. Y., 1880, xiii, pp. 394–398.

Nicholls, S.—Protracted Labor, Hour-Glass Contraction, and Introduction of the Hand into the Uterus. *Obst. Jour. Great Britain and Ireland*, vol. iii, p.p 134–6, 1875.

Naegele—*Lehrbuch. d. Geburtshülfe für Hebammen*,1830; also *Geburtshülfe Mainz*, p. 506, 1869.

Noble, G. M.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv, p. 313, 1882; also *Philadelphia Med. and Surg. Rev.*, xxxi, p. 121.

Osiander—Ueber die Stricturen der Gebärmutter welche die Wendungen erschweren. *Siebold's Journal*, xvi, 1837, p. 1.

Power—Midwifery. p. 187, 1823.

Playfair, W. S.—Midwifery, pp. 411–413, 1880.

Parish, Wm. H.—Hour-Glass Contraction. *Am. Jour. Obst.*, xiii, pp. 395–398.

Popel—Ueber Krankhaften Zusammenziehung d. Uterus spetiellen über spastisches Stricturen dīe aeussem Muttermundes in der Eröffnungs-Periode; *Monatschr. Für Geburtsh.* 21, p. 321

Partridge—Twins. Hæmorrhage from Partially Detached Placenta before Birth of the Second Child. Ante-Partum Hour-Glass Contraction. Version. *Med. Record*, N. Y., xxii, p. 595, 1882.

Ramsbotham—Obstetrics, p. 402, 1865.

Ryan—Manual of Midwifery, pp. 428–431, 1835.

Rigby—Midwifery, pp. 252–354–356, 1841.

Roberts—Midwifery, p. 179–180, 1876.

Reamy, T. A.—Hour-Glass Contraction of the Uterus prior to the Expulsion of the Child. *Am. Jour. Obst.*, xv, p. 304, 1882; also Trans. Am Med. Ass., Phila, 1878, xxix, pp. 411–419.

Radcliffe, S. J.—Ante-Partum Hour-Glass Contraction which Contracted Post-Partum, accompanied by Profuse Hæmorrhage. *Med. Rec.*, N. Y., xxii, p. 151, 1882.

Robertson—*Med. Gaz.*, Dec. 31, 1841, p. 543.

Schmidt—Geburtskunde, pp. 192–193, 1866.

Schröder—Lehrbuch der Geburtshülfe, Bonn, p. 476, 1877.

Smith, A. H.—Spasmodic (so-called Hour-Glass) Contraction of the Internal Os, relieved by the Hot Water Douche. *Am. Jour. Obst.*, N. Y., xiii, pp. 161–166, 1880. Discussion pp. 349–398 of same.

Shaffer, H.—Enchatonnement du Placenta; details importantes. *Union Méd.* Par.; 3. 9. xxxiii, pp. 1027–1032, 1882.

Smith, T. C.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, N. Y., xv, p. 394, 1882; also Reprint Wm. Wood & Co., N. Y., 1882.

Simpson—Selecte d Gynaecol. & Obst. Works, pp. 27–29, 71, 1871.

Swayne—Obstetric Aphorisms, pp. 39, 147, 1873.

Smellie—Midwifery, vol. i, pp. 234–239, 1876.

Spiegelberg—Geburtshülf. 421–3, 584–5, Jahr. 1878; also Enfahrungen u. Bemerkungen ueber d. Stoerungen d. nachgeburts Geschaftes, Würtsburg. *Med. Zeitung* ii, s. 39, 1861.

Stark, J. C.—De Hernia Vaginæ et Strictura Uteri Observatione. Illustr. Jen., pp. 18, 1796–8. Uebersetzung Starks. *u. Arch. Bb.* i, *St.* p. 104.

Shugert, T. A.—Ante-Partum Hour-Glass Contraction, complicated with Hydrocephalus. *Med. and Surg. Rep.*, Phila., xlvii, p. 669, 1882.

Späth—Einsackung der Nachgeburt in Folge spastischer Stricture des innern Muttermundes. *Allg. Wiener Med. Zeitung.* xxiii, p. 30, 1882.

Shaver, P. R.—Ante-Partum Hour-Glass Contraction of the Uterus. Twins, one in each Cavity. *Am. Jour. Obst.*, xv, p. 303, 1882; also *Canadian Med. Jour.*, viii, p. 144, 1872.

Stone. L. R —Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, p. 309, 1872; also *Boston Med. and Surg. Jour.*, cii, p. 517, 1870.

Skae—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv, p. 314, 1882; also *Monthly Jour. Med.*, Sc. x, p. 391.

Stiles, L. P.—Ante-Partum Hour-Glass Contraction of the Uterus. *Am. Jour. Obst.*, xv, p. 313, 1882, also *Leavenworth Medical Herald*, p. 712, i.

Veatch, W. H.—Morbid Adhesions of the Placenta, with Lacerated Furis Umbilical Compression with Hour-Glass Contraction. *Peoria Med. Monthly*, iii, pp. 101–105, 1882–3.

Veit. J.—Stricture d. Uterus u Bruche der Schadel. *Zeits chrift für Geburtshülfe ü Gynœcologie Bd.* iii, s. 253.

Wilson, J. F.—An unusual Case of Twin Labor with Hour-Glass Contraction. Trans. Obst. Soc., Phila. (1879), 1880, pp. 82–84, and *Am. Jour. Obst.*, xiii, pp. 398-399, 1880.

It will be noticed what a large amount of the literature is American. Does this betoken more skill on the part of American practitioners as diagnosticians? Or would the remarks of Karl Braun as to the young man be applicable also to Americans?

57 W. 7th Street, Cincinnati.

ARTICLE IV.

CLINICAL AND PATHOLOGICAL REPORTS OF CASES OF INSANITY.

By S. V. CLEVENGER, M.D., Special Pathologist Cook County Hospital for the Insane.

On the first day of March, 1884, a general enumeration was made from the books of patients who were actually present on that day, with such matters pertaining to them as were of interest in their cases.

The new case books were begun in June last, when every one in the building was sought out and each case recorded, as far as information could be obtained. The numerical results of the work since then may be gathered from the following tables:

	Males.	Females.	Total
Present June 1, 1883	227	273	500
Admitted to March 1, 1884	152	161	313
Total under observation	379	434	813
Of whom died	35	41	76
Of whom were discharged	59	68	127
Present March 1, 1884	285	325	610

Of whom 40 males and 26 females presented probably curable types of insanity.

Ages.	Males.	Females.	Total.
Under 15 years	1	2	3
From 15 to 20	6	8	14
" 20 to 30	102	96	198

From 30 to 40	79	104	183
" 40 to 50	63	67	130
" 50 to 60	27	37	64
" 60 to 70	5	9	14
" 70 upwards	2	2	4
	285	325	610

Civil Condition.	Males.	Females.	Total
Married	95	153	248
Single	172	126	298
Widowed	11	21	32
Unknown	7	25	32
	285	325	610

Years when admitted.	Males.	Females.	Total.
1863	...	1	1
1866	...	5	5
1867	2	...	2
1868	1	1	2
1869	2	3	5
1870	3	2	5
1871	7	9	16
1872	4	2	6
1873	5	13	18
1874	5	2	7
1875	3	7	10
1876	7	14	21
1877	6	9	15
1878	12	16	28
1879	7	14	21
1880	9	20	29
1881	11	24	35
1882	51	40	91
1883	113	110	223
1884	37	33	70
	285	325	610

Nativities.	Male.	Female.	Total.
American	81	67	148
Bohemian	5	8	13
Canadian	6	3	9
Dane	...	1	1
Dutch	3	...	3
English	10	10	20
French	2	2	4
German	69	72	141
Irish	57	103	160
Italian	2	...	2
Norse	12	11	23
Pole	4	8	12
Scotch	3	1	4
Swede	30	37	67
Swiss	1	...	1
Welsh	...	1	1
Unknown	...	1	1
	285	325	610

	Foreign Born.		Native Born.				
Races.	Males.	Females.	Males.	Females.	Total. Males.	Total. Females.	Total.
Anglo Saxon	21	14	33	39	54	53	107
Celtic	56	103	29	15	85	118	203
Germanic	67	63	12	4	79	67	146
Hebrew	4	7	...	1	4	8	12
Latin	6	2	1	...	7	2	9
Negro	...	1	4	8	4	9	13
Scandinavian	42	49	...	...	42	49	91
Sclavonic	10	19	...	...	10	19	29
	206	258	79	67	285	325	610

SUMMARY.

	Ma'es.	Females.	Total.
Native born Americans	33	39	72
Native and Foreign, other nationalities	252	286	538
	285	325	610

Occupation.	Males.
Trades requiring skillfulness	114
Occupations in which skill is not required	134
Merchants	6
Professional	3
No occupation	28
	285

Occupation.	Females.
Housewives	142
Domestics	87
Seamstresses	12
Actresses	7
Teachers	4
Clairvoyant	1
Unknown	77
	325

In the list of psychoses Spitzka's classification has been adhered to as the most scientific one in existence. America has reason to be proud of having originated an alienist who has brought order out of chaos in these matters, and the deeper the asylum physician delves into his cases and compares them with Spitzka's work on insanity, the more will he appreciate the clearness and profundity of the classification as well as the entire subject matter of his book.

I have found it convenient to designate acute from chronic forms of mania, melancholia, etc., as the terms possess something of a prognostic value. In former clinical reports I mentioned monomania as a misnomer, and suggested that a name conveying the idea of logical perversion would be more appropriate for this disorder. Since then I have encountered the term paranoia, as used by Giuseppe, Amadei, and Silvio Tonnini, for this form of insanity, in the Nov. '83 leading article of the *Archivio Italiano per le Malattie Nervose e Alienazoni Mentali*, the organ of the Italian *Societa Freniatrica*, and in the expectation that it will come into general use instead of the word which has caused so much misunderstanding, have adopted it.

Such terminal dements as possess a modicum of their former mental troubles I have separated off into secondary confusional insane as Spitzka suggests. It forms an excellent link between the chronic and terminal types of insanity.

PSYCHOSES.

	Males.	Females.	Total.
Acute alcoholic insanity	4	1	5
Acute hysterical insanity	...	1	1
Acute mania	12	10	22
Acute melancholia	15	10	25
Chronic alcoholic insanity	15	3	81

Chronic hysterical insanity	...	12	12
Choreic insanity	1	...	1
Circular insanity	3	...	3
Chronic mania	25	40	65
Chronic melancholia	16	25	41
Epileptic insanity	31	20	51
Hebephrenia	9	7	16
Idiocy	1	...	1
Imbecility	6	8	14
Katatonia	10	3	13
Paranoia	16	6	22
Paretic dementia	13	2	15
Primary confusional insanity	6	3	9
Recurrent mania	4	13	17
Recurrent melancholia	1	2	3
Secondary confusional insanity	28	60	88
Senile dementia	5	7	12
Stuporous insanity	3	...	3
Syphilitic insanity	2	...	2
Terminal dementia	59	91	150
Transitory frenzy	...	1	1
	285	325	610

The medical Aristarchus can easily find fault with any ætiological table, and particularly where insanity is the effect produced. It is extremely difficult to arrive at probable causes in the main, from many reasons; among them being the absolute want of all information concerning the insane sent to asylums, (aside from such cases where nothing is known by those who send them here, this is an outrage unworthy even barbarians, for often a hint from friends will materially assist toward the treatment and care of the insane); also the disposition, occasionally met with, to hold information back from the physicians from ignorant motives on the part of relatives, and the general illogicality of the masses.

A large proportion of the insane are sent to us as masturbatory; this and religious excitement are main alleged causes. Both may be repudiated as being in 99 per cent. of cases *effects* of the insanity, and not causes. In some of the cases present I have noticed that hernia not only accompanies the disorder, but is at least an aggravator of the mental derangement, if not a direct cause. Certainly, where coprostasis causes melancholia, as grave an intestinal trouble as rupture may also be reckoned ætiological. In male case No. 123, with complete scrotal hernia, and the delusion that he is to be hanged every day at 10 A. M., it is noticeable that when confined to bed on account of the tumor, his mental condition is much worse. The hernias may be allowed to remain, at least, as tentatively ætiological.

Although alcoholism is an effect as well as a cause of insanity, in my cases, I incline to the belief that the estimate is too low.

English statistics place it at one-half of all cases; French and Russian somewhat lower. Were the exact histories known of those concerning whom nothing could be obtained, fully 30 per cent. of insanity in males would, in my opinion, thus be caused.

Besides this, while alcoholism, as might be expected, is small among females, insanity is in many cases induced in them by the indirect effects of the bane in husbands, fathers, brothers, etc. For example, drunken husbands abuse, starve, overwork, and desert their wives, and one case shows insanity to date from a drunken brother striking his sister on the head with a bottle.

Though anæmia may be due to multiple causes, it may properly be classed as causative, and menorrhagia may be also included as inducing anæmia, though placed among menstrual derangements.

I think that puerperal troubles would show a larger percentage were the histories of old cases obtainable in every instance, and from various reasons, I incline to the belief that most puerperal cases, if not all, were predisposed by heredity. In fact, hereditary taint plays a very important part in mental alienation, and some very interesting deductions may be made from the following tables, which I have preferred to give fully, in spite of minor objections which may be raised against various facts, such as paralysis being accredited as a cause in one case. It may merely have accompanied the insanity, and while we do not know what caused either the insanity or the paralysis, it is safe to assume a cerebral blood vessel had ruptured, and the word paralysis sufficiently points to that probability.

PROBABLE CAUSES OF INSANITY.

SIMPLE PROBABLE CAUSES.

Moral causes.	Males.	Females.	Total.
Abuse by husband	...	5	5
Domestic trouble	...	11	11
Fright	3	4	7
Grief	6	6	12
Love disappointment	...	2	2
Mental overstrain	1	1	2
Nostalgia	1	1	2
Poverty	2	1	3
Seduction	...	1	1
Physical causes.			
Alcoholism	43	12	46
Acquired diseases, etc.			5
Anæmia	5	...	1
Chorea	1	...	3
Epilepsy	24	15	9
Erysipelas	...	1	1
"Fevers"	1	...	1

Hernia	2	...	2
Heart disease	1	...	1
Hysteria	...	5	5
Locomotor ataxia	1	...	1
Meningitis	1	1	2
Measles	1	...	2
Menstrual derangements, Amenorrhœa	...	2	5
" " Dysmenorrhœa	...	5	1
" " Menorrhagia	...	1	1
Over lactation	...	4	4
Overwork	...	3	1
Puerperal	...	20	20
Paralysis	1	...	1
Puberty	2	4	5
Rheumatism	2	...	2
Rachitis	...	1	1
Senility	4	7	11
"Sickness"	1	7	3
Syphilis	2	...	2
Smallpox	1	...	1
Spinal caries	...	1	1
Scarlatina	1	...	1
Scrofula	1	1	2
Traumatism, Head injuries	23	3	26
" Insolation	3	1	4
" Intense heat	2	...	2
" Lightning stroke	1	...	1
Typhoid fever	3	1	4
Typhus fever	...	1	1
Inherited Insanity	14	26	40
" Congenitally defective mentality	3	3	6
" Congenital rachitis	...	1	1
" Diseases in general	2	1	3
" Syphilis	1	...	1
" Epilepsy	1	...	1

COMPLEX PROBABLE CAUSES.

	Males.	Females.	Total.
Alcoholism and Syphilis	1	...	1
" " Intense heat	1	..	1
" " Hernia	1	...	1
" " Heredity and traumatism	2	...	2
" " Heredity	1	1	2
" " Opiophagism	...	1	1
" " Traumatism	1	...	1
" " Epilepsy	1	...	1
" " Epilepsy and hernia	1	...	1
Congenital and scarlatina	...	1	1
Epilepsy, inherited scrofula, and trychophytosis	1	...	1
" and puerperal	...	2	2
" " Puberty	...	1	1
" " Overwork	...	1	1
" " Puberty and he edity	1	....	1
" " Traumatism	3	...	3
Traumatism and Typhoid fever	2	...	2
" " Insolation	1	...	1
" " Puberty	1	1	2
" " Fright	1	....	1
Heredity and Traumatism	....	1	1
" " Love disappointment	1	1	2
" " Senility	1	1	2
" " Insolation	...	1	1
" " Puerperal	....	4	4
" " Dysmenorrhœa	...	1	1
Heredity and puberty	1	....	1
Puberty and scarlatina	1	..	1
Hysteria and love disappointment	....	1	1
Senility and hernia	....	1	1
Sickness and exposure	...	1	1
Scrofula and hysteria	..	1	1
Typhoid fever and hernia	...	2	2
	175	182	357
Unascertained	100	143	253
	285	325	610

PROBABLE CAUSES CONDENSED.

	Simple		With Complications		
	Males.	Females.	Males.	Females.	Total.
Total moral causes	13	32	2	2	49
" Acquired diseases, etc	49	37	13	18	117
" Traumatism	29	4	13	3	49
" Puerperal and lactational	...	24	...	6	30
" Alcoholism	34	12	9	2	57
" Menstrual derangements	....	8	....	1	9
" Inherited insanity	14	26	7	10	57
" " diseases	7	5	1	1	14
" Senility	4	7	1	3	15
" Puberty	2	4	5	2	13
Total causes	152	159	51	48	420
Operative in cases	152	159	23	23	357

CAUSES PER CENT. ASCERTAINED PROBABLE.

	Males.	Females.	Total.
Alcoholism	22	6	14.
Acquired diseases	28	24	26.
Traumatism	21	3	12.
Puerperal and lactational	....	15	7.5
Menstrual derangements	...	4	2.
Moral causes	8	19	13.5
Inherited insanity	12	19	15.5
" diseases	3	2	2.5
Senility	2	5	3.5
Puberty	4	3	3.5
	100	100	100
Insanity largely due to inherited defects	29	67	48
" " " acquired defects	71	33	52

An important fact seems to have been elicited by the researches embodied in the foregoing tables, and that is: *Females largely inherit their insanity, while males largely acquire theirs.*

The statistics of single asylums must be taken upon their own merits, and many things considered in connection with them, but it is worth consideration that, so far as I have been able to ascertain, fully one-half the insanity in this asylum has been transmitted by diseased parents, and that the males are more apt to become insane without heredity, while the females are more apt to have inherited their mental defects, or this may be read in another way, could the statistics outside of asylums be obtainable: the male is less apt to succumb to hereditary taint than the female, nevertheless the italicized deduction above may remain as it is.

ARTICLE V.

CONSTRUCTION OF HOSPITALS FOR THE INSANE. By Dr. J. C. SPRAY, Superintendent Cook County Hospital for Insane.

It may be laid down as a generally accepted proposition, that an institution for the insane is an hospital, and not a mere place

of custody. The latter function was for a long time looked upon as the chief function of institutions for the insane, and as a consequence structures modeled on prisons have been erected at a large cost, which are worse than useless for the purposes of hospitals for the insane. Since an institution for the insane is an hospital, and treatment is the object of an hospital, everything in its management is only a means toward that end.

Into the treatment of both the sane and insane enters not only the question of medicines and diet, but the influence of impressions made on the mind. As Bucknill and Tuke * have said, "Dyspepsia caused by anxiety is cured by prosperity and content; the dysentery of armies waits upon the depression of defeat, and is cured by the breath of victory." As mental impressions are derived from one's surroundings, it follows that everything connected with an hospital for the insane should be made subservient to the one purpose of treating the inmates, since it has been found by extensive experience that treatment of the insane in specially devised hospitals yields the best results. The patient, who at home is the center of well meant but illy directed sympathy, and in consequence the monarch of all he surveys, becomes, on entering an hospital for the insane, one of the members of a large community, whose surroundings demonstrate to them that they are regarded as sick people, whether they so regard themselves or not. The mind of the insane is so constituted that it can originate nothing but what is tainted by disease. Healthy ideas may be introduced from without, which are stronger in their influence than those originating in the mind of the patient. To introduce healthy ideas, the manner adopted must be such as will not arouse opposition; the healthy ideas must be insinuated into the mind. If the idea be insinuated into the patient's mind by his surroundings that he is regarded as a person to be treated in an hospital for his sickness—insanity—this idea tends to develop self-control, and the development of self-control tends to cure or alleviate insanity. Cases are met with every day of patients treated at home and in an hospital for the insane with exactly the same medicines. Those treated at home, as a rule, die or become permanently insane; the others as

* Psychological Medicine.

frequently recover. Spitzka†, an impartial authority of repute, says: "An hospital sojourn has, in the vast majority of cases, a good effect on the insane. Curable cases are never injured in their prospects in a medically well-managed institution, and incurable cases should be there for practical reasons, and are better off in than out of an asylum. The advantages of hospital treatment are these: refusal of food and medicines, great obstacles to the treatment of the insane outside of hospitals, are best dealt with by a skillful corps of physicians and attendants always on the spot, with the requisite appliances at their disposal. The necessary supervision of the insane at all hours can be carried on at least expense and greatest thoroughness in the hospital ward. The excessive use of narcotics, and restraint necessary for preventing scandal, noise, and destructiveness at home are not required in the hospital. The sojourn of a patient in a hospital for the insane, and the restraint of its walls, is a constant reminder that he is regarded as insane. It is, in many cases, a far stronger incentive to a kind of reflection which leads to the correction of delusions than any drug."

It is clear then that the greatest effect of hospital treatment is due to the impression made on the mind of the insane patient. If the hospital for the insane be built like a prison; if it be conducted more on the idea of saving money out of the patients than of saving money through curing them, it will damage its patients as much as it would otherwise benefit them. When hospitals for the insane are so built as to impress the patient with the belief that he is entering a prison, such an impression has a very bad effect on him, which tends to make his disease resist treatment otherwise beneficial. If, however, the hospital be built in such a manner as makes the first impression agreeable, the patient is, despite himself, favorably impressed, and this favorable impression is strengthened or diminished as the interior structure or management most resemble those of an hospital or a prison. In the hospitals of the eighteenth century, which were constructed on a prison plan, the insane displayed a fury which would be scarcely credible, were it not that similar pictures are presented from almshouses where the insane, being

†Insanity; its Classification, Diagnosis and Treatment.

few in number, are shackled and confined in dungeons. Dr. A. Bennett*, of the Norristown, Pennsylvania, Hospital for the Insane, has had under observation a patient who had been chained in a dungeon, and her food thrust into her den through an opening in the wall, which she must eat as best she could with her hands tied. This patient, a tall, powerful German woman, came to the Norristown Hospital with a horrible reputation for ferocity. In a very short time she became tractable and quiet, and presented an appearance calculated to attract rather than repel. Being asked, why she was so wild in the almshouse and so quiet in the hospital, she replied: "Because they locked me up like a beast. How would you like to be locked up like a beast?" From this case, which could be duplicated thousands of times in the history of the English, French, Italian, German, and other European insane in the eighteenth century, it can readily be seen that the impression made on the patient by the external appearance and internal appointments of an hospital, is a very important element in the treatment. It may, therefore, be accepted as a fact settled by years of experience in England, Ireland, Scotland, Germany, France, Italy, Holland, and the Scandinavian countries, that the external appearance of an hospital should be the most cheerful and alluring possible.

The cell-like construction of many asylums was due to the fact that they were modeled on old monasteries. These cells were intended to secure for pious monks, the very thing it is desirable for the insane to avoid, the opportunity for unwatched solitude. The insane patient shut up by himself alone or with a single companion finds his disordered fancies exercising complete sway over his mind, while the presence of a single companion tends to aggravate these and excite him to violence. The insane patient under such circumstances readily conceives that he is looked upon as a criminal, and this causes either deep dejection or great violence, as the patient is inclined to be sad or furious. If the last, he has combative tendencies aroused by a fancied infringement on his rights, and violent deeds are not unfrequent under such circumstances. It is a matter of every day experience that men

* Journal of the Medico-Legal Society, July, 1883.

who are violent and uncontrollable in an hospital built on the cell plan quiet down and become the most tractable patients of an hospital built on an hospital plan.

The internal construction of an hospital for the insane is, therefore, of no less importance than its external appearance. It is therefore necessary to inquire what system of internal construction has been found to answer best. Prominent among those active in solving the problems of hospital construction for the insane, have been the physicians of England, Ireland, and Scotland. And as Dr. P. M. Wise,* of the Willard Asylum for the chronic insane, New York, remarks, the first thing which strikes a visitor to the institutions in those countries is that in the county hospital for the insane, the single room accommodation rarely exceeds 20 per cent. of the whole. The associated dormitories frequently contain fifty beds or more, with a few single rooms attached for exigencies. Associated dormitories, it appears, are the prominent feature of the hospitals for the insane of countries where most progress has been made in the treatment of the insane.

Dr. Lalor,† of the Richmond District Lunatic Asylum, Dublin, Ireland, after an extended trial of a few associated dormitories, recommended that a "number of long, narrow, unsocial corridors and cheerless single rooms, be converted into large day and sleeping rooms." As a result of this, "far superior means of supervision, of occupation, and of amusement were afforded, while the accommodation for the insane was greatly increased at a small cost." Of these associated dormitories, Dr. R. Boyd,† a leading English authority on construction of hospitals for the insane, says: "The abolition of single rooms and cells and the substitution of associated dormitories, is a great improvement, as it does away with the prison-like appearance, which has a depressing effect on those mentally afflicted."

Dr. G. F. Blandford,‡ another prominent English authority, says: "The abolition of solitary cells and the association of patients by night and day, also conduces greatly to their quiet and

† *Journal of Mental Science*, Vol. XVI.
Journal of Mental Science, Vol. XXIII.
* *Alienist and Neurologist*, Oct. 1882.
† Reports for 1878-1882.

well-being," and this is also the opinion of Dr. Mackintosh,‖ a prominent Scotch authority. Dr. Wise cites these associated dormitories as one of the features in which English, Irish, and Scotch asylums compare favorably with those of the United States. Dr. Pelman,¶ a leading German authority, bears equally strong testimony to that of Dr. Boyd, and the changes introduced into France, Italy, and the Scandinavian countries are more or less modeled on the examples set by the asylums of Great Britain and Ireland. It may, therefore, be accepted as settled by European experience that hospitals constructed with extensive associate dormitories are best adapted for the benefit of the patients. There are certain objections which are likely to arise as to this dormitory system. At first it would seem as if a greater amount of restraint would be rendered necessary, but in the countries where the system is most followed, in Ireland, England, and Scotland, restraint is reduced to the greatest possible minimum.

Second. The question of adaptation to American hospitals would naturally arise. It does not follow because a thing has been found practicable in Europe that the same will be successful in America.

With regard to this question, Dr. Wardner ** who has had an unwilling experience, caused by the fire in his hospital for the insane at Anna, Ill., says: "These patients have been contented, and the number of escapes has not been as many as in former years. Sleeping in such large associate dormitories seems to have had the effect of keeping them quieter, and with the exception of occasional excitement from epileptic attacks there has not been as much disturbance as would have occurred with the same number of sane people lodged in the same room. Those who had been seriously noisy and disturbed their neighbors, while occupying single rooms or small dormitories, out of consideration for others or in consequence of the restraining influence of numbers and the eye of the night attendant, became quiet and acquired the habit of keeping still, and of sleeping well. In fact, a general improvement has been observed in both mental and phys-

‖ *Journal of Mental Science*, Vol. XVI.
¶ *Journal of Mental Science*, Vol. XVI.
** Alienist and Neurologist, Oct. 1881.

ical health." Similar testimony is given by Dr. Catlett †† of the Hospital for the Insane at St. Joseph, Missouri, who had a very similar experience. Dr. Kiernan, ‡‡ at one time assistant physician of the Ward's Island New York City Hospital for the Insane, states that the overcrowding of that institution led to the use of associated dormitories, which were attended by good effects, and Dr. Godding, §§ now of the Government Hospital for the Insane at Washington, from an experience at the Taunton, Mass., Hospital for the Insane, is of opinion that associated dormitories for seventy-five patients are not attended by any but good results. It is therefore clear that this system is practicable in the United States. The question of cost is another very serious question to be considered. From the experience of Dr. Lalor, already cited, it is evident that an hospital built on the associated dormitory system costs less than one built on the cell plan.

Dr. I. Ray *** accounts for the great discrepancy in cost between American and European hospitals for the insane by this very element of associated dormitories. He says, "the point which may account for comparative cheapness of construction in Great Britain is that a much larger proportion of the patients sleep in associate dormitories. In Scotland this is especially the case. In the pauper hospital for the insane at Morningside, Scotland, with some hundreds of patients there were only a dozen single sleeping rooms." Taking all the circumstances cited into consideration it follows, First: That associate dormitories act in a beneficial way on the insane, and tend to diminish suicides, since these are committed when the patient is alone. Second: That they are perfectly well adapted for use in hospitals for the insane in the United States. Third: That the cost of associate dormitory hospitals is much less than that of cell hospitals.

If associate dormitories are, for the reasons cited, best adapted to the treatment of the insane, the question of rendering effective these and other agencies in the treatment of the insane nat-

†† Report for 1881.
‡‡ Lectures on Insanity.
§§ Cited by Kiernan Op. cit.
*** Journal of Nervous and Mental Disease 1878.

urally arises. Among the elements which enter into this problem are, the selection and number of attendants. In the New York City hospitals for the insane, a proportion of one attendant to 14 patients has been found to be the lowest number compatible with the proper employment and care of the insane. In the county asylums of Great Britain and Ireland, the preferable ratio has been found to be one attendant to every 11 patients, and it should be remembered that on account of the almost universal adoption of associate dormitories, this proportion of attendants is really much more effective than it would otherwise be since one night attendant, under the associate dormitory system could better supervise 75 patients than one attendant could five under the cell system.

Owing to this large proportion of attendants, restraint in the English asylums is reduced to a very minimal amount, and the increased cost of attendants is very well made up by the decreased opportunities of the patients for destructiveness. If such were not the case, the English rate-payers, who are the governing body of the English county hospitals, and who are by no means inclined to liberality, since they pay for the support of these institutions, would not sanction the employment of so large a number. From the higher standpoint of humanity, the contact of many sane minds, free from the trammels of kindred and under medical direction, with the insane is very desirable, since it tends to introduce sane ideas into minds which are incapable of originating these for themselves. The insane patient readily perceives, as a rule, the insanity of his associates. A curious instance of this kind is narrated by Dr. Spitzka.††† In consequence of his attempts to alleviate the condition of the insane in New York, he became known as the friend of the insane. The courts discharged from hospitals for the insane several undoubted lunatics as "sane." Each of these admitted to Dr. Spitzka that every one of those liberated, except the one making the communication, was a lunatic. The fact that others who claim to be sane, are justly treated as lunatics, naturally leads the insane person to look upon his mental operations with suspicion at times. If he have too few sane minds in constant contact with him, he is, while benefited, rendered somewhat

†††*American Journal of Neurology and Psychiatry*, Vol. II.

secretive, and this secretiveness retards a recovery which would be accelerated by contact with sane minds properly trained for contact with the insane. In the English, Irish, and Scotch hospitals for the insane, not to speak of the German, Italian, French, Scandinavian, and Swiss institutions which follow in the wake, attacks of furious excitement are neither so frequent nor so prolonged as in the American institutions scantily provided with attendants.

This fact is of great significance. Under circumstances which it might be imagined would aggravate the disease, it is alleviated. It is important in this connection to ascertain the qualifications of English attendants. According to Bucknill and Tuke*: "A good attendant ought to be a good observer, to have the natural power of remarking differences between one patient and another, and in the same patient at different times; keen to notice circumstances which distress and those which soothe, apt to remark all signs of disturbance and danger, and all means of influence..... Mere apathetic good humor is a negative quality, if not a disadvantage. An attendant on the other hand should not be fussy, but should gain and maintain influence by constant care and kindness." With attendants in the ratio mentioned and chosen for their possession of the qualities cited, it is not at all astonishing that the English should be able to do so much for their patients, and that the types of insanity frequent in the United States should present somewhat different features, since the entire management of the hospital aims at the treatment of the patients.

It is obvious that in addition to the great frequency of single rooms causing disadvantages, the American asylums have too few attendants. That large associated dormitories in the asylums, containing from fifty to seventy-five patients, should have one night attendant is self-evident. It is also clear that during the day the patients should be brought into contact with as many attendants as possible, since provision for no more attendants than can do routine duties prevents attendants exercising the proper control over their patients, prevents them from inducing the latter to labor, and also renders necessary more restraint than is

* *Psychological Medicine.*

desirable. An overworked attendant can neither be as cheerful nor as disposed to make allowances for the outbreaks of the patients under care as is desirable for their proper treatment; there can be but little doubt that many of the cruelties perpetrated on the insane are perpetrated in institutions too scantily supplied with a sufficient staff of attendants. In the English, Irish, and Scotch institutions attendants much more rarely perpetrate cruelties than in the institutions of the United States, and in more than one instance an explanation of the cruelty is to be found in the fact that the attendant has been left alone to manage too many patients for too many successive hours. A large staff of attendants implies more labor on the part of the patients, less destructiveness, less chance for cruelty, and inferentially a greater number of recoveries. The English ratio of attendants to patients is therefore a desirable one. A question arising out of the construction of associated dormitories is that of how many small rooms shall be provided for exigencies in as close proximity as practicable, provisions being made for the exclusion of sound. There are no very certain datas to serve as a guide, but in some American institutions three single rooms to each associated dormitory of twenty-five patients, has not been found to be an excessive proportion. Judging from this, a proportion of nine single rooms to each associate domitory of seventy-five beds is desirable to meet all possible emergencies.

The important elements in the construction and internal management of an hospital for the insane, then, are: First: A cheerful external appearance; to secure this it would be desirable not to use bars, but gratings on the interior and not exterior of windows. The windows should be large paned, so as to afford as much light as possible. These are less expensive in the end than small panes, and give a much more cheerful appearance. Second: Associate dormitories, with single room provision for about twenty per cent. of the patients, inclusive of the rooms annexed to the associate dormitories. The capacity of the associate dormitories should be about seventy-five, and these associate dormitories should be separate from the day rooms. Dining rooms should be provided with a capacity for one-half or the whole inmates of the ward. Third: Heating of the institution

should be by direct radiation. Fourth: The building should be lighted by gas, as being the most cleanly, and by experience, the least dangerous. Fifth: The number of attendants should be as near the English ratio of one attendant to eleven patients as possible.

ARTICLE VI.

EMBOLISM OF THE AXILLARY ARTERY. By ADDISON H. FOSTER, M.D., Chicago.

The case to which attention is here directed, was one occurring in the practice of Dr. Wm. E. Clarke, of this city, through whose courtesy I was several times enabled to make observations of it. I submitted a report of the same to the Chicago Medical Society in the year 1875, from rather full notes taken at the date of observation, which have unfortunately been since mislaid. The following report is based only upon some memoranda taken at that date and recently found, as also upon the points which were at the time of observation more especially impressed upon my memory.

The subject of the attack was a female, about 35 years old, married, and the mother of several children. She was of rugged family and had enjoyed sound health until specifically infected by her husband; after which she was continually ill and suffered severely with metritis and anteflexion of the uterus. She was particularly liable to precordial distress and irregular action and palpitation of the heart, with accompanying hysterical phenomena.

About a year previous to the occurrence of the embolism a roughness became audible with the first sound of the heart, but with no apparent organic cardiac change.

On the 16th of January, 1874, she was suddenly seized with an agonizing pain in her left arm; most intense in the axilla, at the bend of the elbow, and along the wrist and hand. She complained of cold in the arm, but of no general chilliness, of numbness and defective sensations and inability to move the part.

The surface was cold to the touch and purplish in color. Upon examination no radial, ulnar, nor brachial pulsation could be detected. The heart's rhythm was irregular, with a decided systolic bruit, and the pulse about 90 to the minute. The patient was kept quiet in bed; the arm wrapped in cotton batting, and artificial heat applied in order to maintain a normal temperature. After about three weeks the radial pulse began to return very feebly; it slowly grew stronger, but never attained its former strength and fullness. The pain contained to be severe for about six days and then gradually subsided, with occasional accessions quite sharp but brief in duration.

The surface temperature remained low for months. Desquamation followed in July. The arm remained permanently weakened and of small size.

The patient continued to live in variable, but yet generally poor health, and with very intractable uterine disease. There were occasional cardiac disturbances and consequent apprehension of impending danger to the limb or to life. There were also hepatic derangements of more or less constant occurrence.

On the 29th of October, 1874, a species of broncho-pleuropneumonia invaded the right lung, and in ten days was accompanied with a copious expectoration of offensive pus. The dyspnœa, palpitation, and weakness increased until death occurred on the 15th of November. Unfortunately, the pathological anatomy of the case was not cleared up by a post-mortem examination.

In reviewing its feature it is evident that the embolus was mechanical rather than septic in its nature, and was derived probably from the valvular margins of the heart, as the occluding plug on the arterial side of the general circulation is generally from that source or from clots among the columnæ carneæ.

Accounts of embolism in the upper extremities with recovery, are not numerous. The recoverymay take place, as in other parts, by the collateral circulation being promptly established, and by the disintegration or resolution of the embolus.

Literature throws meager light upon the theory that specific poison is the cause of the cardiac lesions, although it may be admitted as possible.

That the migratory plug chanced to lodge in the axillary artery rather than in the left middle cerebral—the more frequent occurrence—naturally prolonged the history of this case. although it is claimed that even in the latter event recovery sometimes results.

An arterial embolus from the left side of the heart without septic properties would rarely account for an abscess of the lung, as a benign subpleural infarction of the lung would not be expected to break down into a large quantity of pus.

A venous embolus of septic or putrid origin would not be anticipated from any known condition of the patient.

It could be more readily imagined that the pus had an hepatic origin, a supposition perhaps not incompatible with the state of the case.

ARTICLE VII.

THE NECESSITY FOR AN AMBULANCE SYSTEM IN CHICAGO.

By G. FRANK LYDSTON, M.D., late Resident Surgeon Charity Hospital, and State Emigration Refuge and Hospital, New York City.

To one who has had the opportunity to examine the ambulance system in vogue in New York City, and to compare it with our own faulty and ineffectual police patrol system, the necessity of some more convenient and comfortable plan for the disposal of cases of emergency of various kinds, particularly cases of street accident, is but too manifest; but as there are many who are not familiar with the ambulance and its workings as illustrated by the system alluded to, a cursory survey of the subject may be of interest. The evils which the ambulance system is designed to combat have not been wholly abated by it, even in New York city, but the mere fact of their occasional unavoidable occurrence will serve to illustrate its necessity and manifold advantages. As an illustration of the numerous instances in which a well organized ambulance corps is a *sine qua non*, we will quote verbatim an item from a leading daily: "A few weeks ago a New York policeman arrested a man for drunkenness, who was afterward

found to have been in a stupor caused by a fracture of his skull. Had the officer been fit for his position the man would have been taken to a hospital, instead of a police station. About the same time two Hartford policemen arrested Deacon Dewey, a respectable citizen of Granby, who was jolted from a load of tobacco in a street of the Connecticut capital. The good man's righteous indignation at the imputation of drunkenness has found expression in a suit for $6,000 damages for the false arrest. The other day a Brooklyn policeman arrested a respectable young married woman who stumbled in the street, and she was separated from her child and thrust into a cell on a charge of drunkenness. Her outraged husband did not discover her humiliating position until in the evening, and she was disgraced by the imposition of a fine before the magistrate released her. If she was sick, as she and her husband affirm, and not intoxicated, a jury would probably award her $10,000 damages for the indignity she has suffered. The people must be made to understand that it is a costly thing to allow an incompetent policeman to be intrusted with the power to make arrests, and when that fact is thoroughly understood at least 10 per cent. of the police of most cities will be dismissed." Now, it would seem that such strictures upon the police are entirely too severe, and it is just here that our own police patrol, albeit a very useful institution, which has been introduced as a remedy for such evils as accrue from the neglect of the injured, fails of its object. The police patrol system throws entirely too much responsibility upon the officers employed in its operation. We will take, for example, the case of a man who has been found lying in the street or in some out of the way locality. He is unconscious, and may or may not have received external injuries, or have taken liquor, the evidences of which are always sought for (and usually inferred to exist), and often the only thing manifest is that he is a stranger and unconscious. Now, let us consider for a moment what may be the matter with this man. Well, to begin with, he may be merely drunk, or he may have a condition of intoxication superadded to some serious injury; perhaps he has fallen upon his head while intoxicated, and received a fracture of the skull. He may be suffering from apoplexy, uræmic coma, or that condition of mental torpor so frequently noticed as

a post-epileptic phenomenon. He may be under the influence of a narcotic poison, or perchance the soothing influence of the sand-bag; but in any case he is wholly or partially unconscious, and as before stated, he may have been drinking, the fumes of the liquor tending to confuse the case considerably. I will now ask my professional brethren if it is an easy matter to make a differential diagnosis under these circumstances? I imagine I hear the answer, "Very difficult sometimes outside of our text-books," and yet we expect our policemen to make the diagnosis. How natural it is for these officers to relegate the case to the domain of "drunk and disorderly!" They know little or nothing of the other conditions, and most obviously they are likely to see only that with which they are most familiar.

We will suppose that they take up this man, and their taking up is not apt to be very gentle if the odor of liquor be perceptible about the victim; place him in the bottom of the ordinary vehicle yclept "the patrol wagon," and jolt him off to the police station; place him in a cell and lock him up. In the morning the prisoner is found dead, and upon autopsy a clot of blood from a ruptured middle meningeal is found pressing upon the brain. Should these officers be indiscriminately censured for an accident due to their lack of surgical knowledge? I think not, for who among us but has made even greater mistakes? The illustration given is no fancy sketch, but is drawn from personal experience. In one instance occurring in the streets of New York City, I saw several officers roughly shaking a man whom I found upon examination to have just recovered from an epileptic fit. He had been drinking and the odor of the liquor led the unscientific minions of the law to assume that he was drunk, his mental torpor being supposed to be the obstinacy of drunkenness. How could these officers be expected to recognize the real condition of the man? There are, as I have stated, numerous conditions in which such mistakes might be made. We all know the difficulty of differentiating certain forms of coma. Hæmorrhage into the pons varolii and opium poisoning give very similar symptoms, and require careful consideration in diagnosticating the case, and if in such a case the patient should also happen to be drunk, the diagnosis would be doubly obscure. The author quoted from the

daily press states that when certain facts are understood fully 10 per cent. of the police force will be dismissed; but looking at the matter from a medical standpoint, the whole police force would have to be discharged, if the ability to differentiate certain pathological states from "drunk and disorderly" was to be taken as a criterion of their capacity. But the municipality pays for policemen, and poorly enough too, and ought not to expect to get medical qualifications thrown in. It is fortunate for the officers that they are paid as policemen, and not as physicians, for the latter are not supposed to have any rights which the municipality is bound to respect. I might remark in this connection, that the policeman is expected to furnish a physician himself in all cases of emergency, particularly at the police stations, and to pay him out of his own pocket. If he fails to furnish a physician, he is liable to punishment, should any mishap occur through lack of medical attention. Should the physician send in his bill to the city, he will not receive the price of the paper it is written on in return. Now this system, or rather lack of system is all wrong. There is but one physician regularly employed by the city for such work, and it is obviously impossible for him to attend to it all. He is overworked and poorly paid. There should be in Chicago,as in New York city, a regular corps of police surgeons, one or two at least for each division of the city. These should have regular salaries, or should be fairly paid for each case, as under ordinary circumstances. In this way, all cases under police jurisdiction, requiring medical attention, could have it promptly and efficiently rendered, and the city would not be continually imposing a special tax upon both policemen and physicians. As a substitute for a corps of police surgeons, a provision might be made by which any physician could be called upon to care for an injured person, and could attend him with the security of being paid for his services.

Very often it would be desirable for a physician to accompany an injured person to the hospital or station to which he is removed by the patrol, but if he does so it is at his own expense, unless he can get some compensation from the patient, which is rarely the case. A regular system of ambulances under the management of the various hospitals is really a pressing want with us.

The ambulances of New York city are under the control of a number of hospitals, each one having its own line, with its corps of surgeons. Some of the most effective work is done by the ambulance attached to the Chambers Street Hospital, this institution being especially designed for cases of emergency, the best of the cases being retained by the staff, and the rest distributed among the other hospitals of the city. This institution uses the telephone from police headquarters. The signal, 5–5–4, is sent to the ambulance stable on Duane street. This calls up the driver, who is then told to drive to the place of the accident, where the ambulance surgeon is met, he having run to the scene while the horse was being harnessed. It takes about half a minute to prepare the ambulance and get under way. About sixteen calls a day are attended on the average. The district covered is not large, but three ambulances are required for the work. The Ninety-ninth Street Hospital ambulance service is not so complete as the others, but it covers more ground than any of them. The district runs from Sixty-first street to King's bridge, on the west side of the city, and from Seventy-fourth street to West Farms on the east side. The station houses in the district connect with the hospital by telegraph. When a gong at the back of the hospital is struck, a similar bell in the building notifies the surgeon. The horse is harnessed, the doors of the stable are thrown open at the same time, and the ambulance is away in two minutes. St. Vincent's Hospital runs two ambulances, and is the most perfect service in the city. One of these gets ready in fifteen seconds in the daytime and is rarely more than a minute getting under way at night. A call bell is by the doctor's bed. This awakens him, while at the same time a weight falls and lights the gas. He hastily dons his boots and trousers, and catching his coat from the rack on the way, rushes for the ambulance. While this is going on a bell strikes in the stable, a weight falls, opening the doors and unhitching the horse; the animal being trained runs under the harness, which is dropped and clasped in an instant, after the fashion of our hose-carts, and the machine is ready to start.

Bellevue Hospital runs four ambulances, and being a public institution, competes with all the others. The Presbyterian Hos-

pital covers the territory controlled by the 59th and 88th street police stations. The ambulance gets under way in one minute after the alarm is sounded. The Roosevelt Hospital covers a district including the 20th and 22d wards. The distances traversed by some of these ambulances is, as may be noticed, sometimes very great. The spirit of competition between the various hospitals is very eager, each surgeon striving to capture the case for his own hospital. Sometimes three or four ambulances arrive on the scene of an accident at nearly the same time. It will be seen that the system is very thorough and efficient, and far superior to our police patrol. Instead of the patient being consigned to the care of police officers and hurried away over the rough pavement in an imperfectly equipped and uncomfortable wagon, he is placed in charge of skillful surgeons, and taken to the hospital as leisurely and comfortably as may be required. We have among us good hospitals, and in sufficient number to be all that is required, and I can see no valid reason why we should be behind the great metropolis in our hospital equipments, To be sure, our public institutions are run by politicians, while in New York the physicians have, at least, the dressing of wounds and the compounding of pills left to their own jndgment, but the public may not remain in darkness forever, and we may yet see a hospital millennium even in Chicago. Perhaps, however, a hospital millennium is already with us, for our Commissioners have established the fact that doctors do not need to know anatomy now-a-days, especially if they must disfigure the pauper form divine to obtain that knowledge. All that is required is that the medical lights shall be of good Republican or Democratic principles, as the case may be, and that each shall be a power in his ward. If a physician should be so unfortunate as to be connected with a college, and should be so audacious as to teach medicine and surgery, instead of politics, he is at once cast into outer darkness, but should he be able to discourse fluently upon the merits of the various brands of Sp. frumenti, and to control a certain amount of the political rabble, he is a fine fellow, and deserving of all consideration. Woe, woe to the unlucky wight who attempts to take advantage of our abundant material and advance our noble art! There is, I am happy to believe, a simple solution of the

difficulty, and that is, the establishment of hospitals in connection with our medical colleges, a step in which Rush has already taken the initiative. I have made, I presume, quite a pronounced digression, but I am confident that it is apropos of the situation.

125 State St.

ARTICLE VIII.

REPORT OF CASE OF MALIGNANT STRICTURE OF THE DESCENDING COLON. By Dr. J. D. SKEER. Read before the Chicago Pathological Society, and reported by the Secretary.

Mr. F. C., of good family history, and previous good health, suffered from indigestion, constipation or diarrhœa, and general debility, since last September. Nov. 11, stated to Dr. Skeer that he had had no movement for two or three days; mild cathartics were then ordered, but ineffectually.

For the next few days the abdomen remained uniformly distended; dullness in the right iliac region, no tumor or well localized pain, but paroxysmal nervous pain.

Temperature 100°, pulse 76.

The diagnosis was at this time obstruction from hardened fæces at the ileo-cœcal valve, perhaps atony of bowels or spasmodic stricture, possibly organic stricture.

At no time, except just before death, did the pulse rise above 80, or the temperature above 101°.

Mild cathartics were again prescribed, followed by copious injections, containing castor oil, etc. These injections were frequently repeated during the progress of the case, but only about two-thirds of the fluid was returned each time. Morphia was given in small doses at bed-time, to relieve pain, relax spasm, and produce sleep.

On the morning of the 14th he passed a number of small scybalæ and a volume of offensive gas. Dr. McClure and Dr. Knox, called in consultation during the next two or three days, both concurred in the diagnosis of obstruction from fæcal accumulation.

On the evening of the 18th, for the first time, the patient vomited fluid stercoraceous matter, and on the morning of the 19th he died. Post-mortem examination six hours after death, was made of the abdominal viscera. The peritoneal sac contained a large amount of yellowish feculent fluid. The undertaker, in embalming the remains, had perforated the bowels with a trocar in a dozen or more places. The small intestines were congested, and the ascending colon very much distended. Two very small perforating ulcers were found in the transverse colon, but no traces of peritoneal inflammation.

In the descending colon, just above the sigmoid flexure, was found an organic structure, almost closing the caliber of the bowels, leaving a passage the size of a goose quill. All fæcal matter which was soluble was thoroughly liquefied, and instead of hardened fæces at point of obstruction, a collection of grape seeds and apple skins, which had acted as a valve, thus preventing the escape of more than two-thirds of the amounts injected.

In regard to the specimen, attention was called to the constricting bands of peritonæum; to the contraction, thickening, and induration of the walls of the bowel; to the circular ulcer above and extending down into the stricture, and to the small caliber of the bowel.

Note.—The above specimen having been referred to a committee for microscopical examination, it was reported at the following meeting of the society that the growth was found to consist of round-celled sarcoma, embryonic cells,— rarely found in the alimentary canal, and exceedingly malignant in nature.

J. H. TEBBETTS, Secretary.

CORRECTION.—In the February issue of this journal, in the original communication of Dr. R. F. Henry, Article III., page 130, fifth line from the top, the word "strengthening" is printed in place of "straightway."

Society Reports.

ARTICLE IX.

CHICAGO PATHOLOGICAL SOCIETY.

Regular meeting, October 8, 1883.

The Society was called to order by the President, Dr. Angear,

The minutes of the last two meetings were read and approved. Dr. Fannie Dickinson was elected to membership unanimously.

Dr. F. C. Knight was proposed for membership by Dr. G. F. Lydston and the Secretary.

The Society then listened to the reading of a very interesting paper by Dr. H. M. Lyman, on Apoplexy, in illustration of which the author gave a detailed account of numerous interesting cases. In diagnosis one needs to exercise careful judgment: alcoholic intoxication and an apoplectic seizure may coexist. Hysterical women have fallen in an attack of unconsciousness, with resulting hemiplegia, which in a short time may be transferred to the other side of the body.

Apoplexy may be simulated by uræmic poisoning. In apoplexy the temperature first falls, then rises. In treating the worst cases nothing is of avail; in those milder, we may employ leeches, wet cups, general bleeding only when the right heart is involved.

Attention should be directed to the state of the bladder, and the bowels be kept open.

For medication, give moderate doses chlorate of potassium, and watch its action on the kidneys; also tinct. aconite root. In the stage of convalescence, dietetic general treatment, electricity, and massage.

The paper being before the Society for discussion, the President, Dr. Angear, marked his interest in the paper and its subject matter. To the profession the diagnosis of apoplexy is all-important, and in some cases, when so diagnosticated, apoplexy had not occurred.

He had not a large experience, but a case seen years ago would bear relating, in which a lady suffering from headache, and reflex pains in the left shoulder and arm, had been treated by her physician for uterine disease, and was suddenly seized with apoplexy and death, the post-mortem revealing this condition. The disease of the brain is partly revealed by these obscure symptoms, disturbances of the mucous membrane, as well as interference in the nutrition of the skin, on account of which bed-sores form quickly. Fatal syncope is often diagnosticated as apoplexy. The diagnosis should be carefully studied. In another case, when hastily summoned, he found a man speechless and hemiplegic, the eye natural and senses unclouded, which condition was quickly relieved by an emetic, and the throwing up of a large amount of sauerkraut, beer, etc.; had death occurred the diagnosis would probably have been made of apoplexy, and that of the nervous variety may have really existed.

A member of the County Hospital staff present then spoke of a case of medico-legal interest seen lately. The patient was in coma, hemiplegic, with all symptoms of apoplexy, and had been picked up in this condition on the street. No signs of foul play were noticed. Remained thus forty-eight hours, then died. Post-mortem examination revealed a large blood clot upon left lobe of brain, and a fracture of the skull through the left parietal to the temporal bone. No bruises were visible on the scalp. The cause of the fracture may have been a blow from a sand-bag.

Dr. C. J. Lewis thought Dr. Lyman had given all the points to bear in mind in diagnosis, and briefly related a case of a man whose skull was fractured by a fall in leaping from a window; the symptoms were of apoplexy, hemiplegia, etc. In trephining there was found extensive vascular rupture producing great pressure, although there was but slight pressure from the bone.

Dr. Tebbetts briefly spoke of two recent cases; after which the society proceeded to consideration of miscellaneous business.

The President remarked that as there might be some complaint made during the winter on account of the present location of the society being insufficiently central, and as the present place of meeting had been secured experimentally, he suggested the consideration of the matter at present meeting.

Dr. Lyman moved that the officers of the society be appointed a committee to look up a suitable hall or other convenient place for the society, and report at the next meeting. Carried.

Dr. Lyman's name was, by motion, added to the above committee.

Among those present were Drs. Angear, Beecher, Dobbin, Harper, Lewis, Lyman, Treat, Tebbetts, and several visitors.

The society, on motion, adjourned.

J. H. TEBBETTS, Secretary.

CHICAGO PATHOLOGICAL SOCIETY.

Regular meeting, November, 1883.

The society was called to order by the President, Dr. Angear. The minutes of the last meeting were read and approved.

Dr. F. C. Knight was elected to membership unanimously. Dr. R. J. Curtiss was proposed for membership by Drs. Lyman, Lydston, and Harper.

The society then listened to the reading of an interesting paper by Dr. G. Frank Lydston, entitled, "Some of the Fallacies of Modern Sanitation, with Especial Reference to the Sewage System in Relation to Zymotic Disease."

The subject comprised a variety of topics, and its discussion was not a matter of recent date, but had been under consideration many years, and afforded material worthy of thought to-day. Colleges should instruct graduates in the elements and essentials of sanitary engineering.

The sewage system affords a most potent cause of sickness, and in the large cities the majority of cases of illness come under the name of germ diseases.

The term "modern improvements" he considered sarcastic and incorrect. They served for extension, not prevention, of germ-bearing material. He doubted if there were a single perfect plumber in town. Are water-closets in expensively plumbed residences perfectly trapped and ventilated? The author considered not by any means. The same charge was true, and more especially so, in case of stationary washstands in sleeping rooms. In water-closets, gas always remains beneath the trap, waiting to puff upward when the closet is used and the trap opened. Many varieties of traps were then described, sufficiently to point out the defects of each.

The noxious gases, germ-bearing, may be treated chemically. Solutions placed between double traps answer this purpose. The "germicide," a patented arrangement, was considered good, although imperfect.

In conclusion, water-closets should be detached from the main portion of the dwelling, with a well ventilated passage leading to them.

As concerns stationary washstands, how can the gases be kept below the trap? It was about impossible to do this. The heated air of the room attracts the gases thereto, in direction of the least resistance, and in the sense of smell even there was no protection. Sewer gas was a varying compound, and there was no distinct odor in many cases. Stench was a blessed warning when present.

Cases were cited proving beyond doubt that scarlet fever had been conveyed from house to house, along a street, the germs being inhaled only by those persons sleeping in rooms having direct communication, by means of stationary washstands, with the sewer.

The street mains may be flushed daily. This as done in Paris is valuable.

The ventilating shaft in the house should open into a chimney in constant use, as a warm current is required. No better arrangement could perhaps be devised than the complete detachment of all "modern improvements," in way of plumbing, from the dwelling, and at all events remove all stationary washstands from sleeping rooms. Sewer gas is absorbed by the walls

of a house if porous, just as is "crowd poison" in hospitals and barracks, making them untenable, until disinfected by chlorine gas.

The question arises, how are the cities to escape zymotic diseases as nearly as possible? Clean and keep cleaning the alleys, empty the cesspools and allow the sunlight to penetrate them, but use no disinfectant drugs to cover the stenches; remove the cause and disinfectants are needless.

Finally, in the sick room allow a liberal supply of fresh air, thus deodorizing and disinfecting, but dispensing with carbolic acid and such chemicals.

Owing to the lateness of the hour, discussion by the society was postponed.

The society then listened to the reading of a paper by Dr. R. J. Curtiss on a kindred topic: "The Disposal of Chicago Sewage." An abstract of this interesting paper, to be appreciated, should be fully as complete as was the paper itself. At times very amusing, yet truthful in statistics, and accurate in general statement, the paper commanded the closest attention of the society, and on conclusion the author received, on motion of Dr. Lyman, a vote of thanks of the society. Discussion was again postponed on account of the lateness of the hour.

The society then proceeded to the transaction of its miscellaneous business, and first received the report of the committee on place of meeting. Various locations were discussed, but on motion the society granted committee one month longer, advising it possible, the engagement of a suitable parlor in the Washingtonian Home. Dr. C. W. Earle informed the society that he would secure the above room for the next meeting, but was unable to state whether such arrangement could be made a permanent one.

Among those present were Drs. Angear, Brower, Danforth, Dobbin, Earle, Harper, Lyman, Root, Seely, Tagert, Twining, Tebetts and a number of visitors.

The society, on motion, adjourned.

J. H. TEBBETTS, Secretary.

CHICAGO PATHOLOGICAL SOCIETY.

Regular meeting, December 10, 1883. The society was called to order by the President, Dr. Angear. The minutes of the last meeting were read and approved.

Dr. R. J. Curtiss was unanimously elected to membership. Dr. J. D. Skeer was proposed for membership by Dr. Tebbetts and Dr. Lyman.

The society then listened to the reading of a paper of unusual interest by the candidate, Dr. Skeer, giving a report of a rare case of intestinal obstruction, followed by the gift of the specimen to the society. A full abstract of this interesting report is omitted, as its publication was ordered by vote of the society.

The paper being open for discussion, Dr. Van Buren briefly mentioned a case occurring in his practice about six years ago. The patient, residing at the Sherman House, by profession a civil engineer, was taken gradually ill, having suffered for five or six days from constipation. Stercoraceous vomiting followed for three or four days almost constantly—partly liquid, sometimes solid. Ice checked, but did not stop the vomiting. The temperature continued below normal; the skin clammy; pulse not at any time accelerated, but below 70. But little nourishment could be given between the attacks of vomiting.

Dr. Van Buren could not tell what caused the obstruction, but thought it was probably not impaction. For treatment, he gave small doses of tartarized antimony, $\frac{1}{8}$ to $\frac{1}{4}$ grain, to relax the system, also opiates, which relaxed spasm, relieved pain, but did not produce much sleep.

Some stimulants were given, but no cathartics. In giving injections, he used a stomach pump with a long rectal tube, alternating large amounts of water, then air, for three days. Still the man kept vomiting. Then came a large free evacuation, and the man fully recovered. Did not consider it a case of pathological obstruction.

Dr. Clark supposed no treatment on earth would have relieved that stricture in Dr. Skeer's case, and saved the man.

Dr. Lyman considered the case one of great interest, and the paper a valuable one; the society should publish it. The specimen should be referred to a committee for microscopical examin-

ation, and thus decide whether the thickening were not of malignant origin. The case reminded him closely of one seen some years ago. A man suffering a year from dyspeptic symptoms, still showed nothing very decisive, and became somewhat emaciated, though without fever, the temperature being below the normal. Dr. Lyman's suspicion was directed to the pyloric orifice of the stomach. The patient sank lower; refused food; obstruction of the bowel obtained, with stercoraceous vomiting for a short time, and he died. A few days before death there appeared, as indicating malignant disease, an œdematous condition of the leg. On post-mortem examination, the doctor found an annular sarcomatous infiltration of the ileo-cœcal valve, with considerable narrowing of the opening. The malignant nature of the infiltration was only detected on careful microscopic examination. Dr. Lyman thought the case reported this evening would also prove malignant; he therefore moved that the President be appointed a committee to examine the specimen and report at next meeting. Carried. On motion of Dr. Van Buren, Dr. Lyman's name was added to the committee, and on motion of Dr. Avery, that of Dr. Skeer was added to the same committee.

Dr. Lyman continuing, spoke of another interesting case, illustrating the fact mentioned by Dr. Skeer, "that a post-mortem furnished the best guide in diagnosis in such cases." A little child, born of a healthy mother in natural labor, and in good condition, had had on the second day no passage, as is quite common, but the next day seemed in pain and refused the breast. The temperature was a little elevated, and an anal examination with the oiled little finger passed in full length revealed a narrowness or constriction. An oiled catheter showed the same constriction, and engaged in it, passing to the sigmoid flexure and no farther. Fæcal matter clung to the catheter.

Dr. St. John made the same examination, and found the same condition. The bowels became distended, death occurring at the end of the week. Post-mortem examination revealed no stricture at all at any point, but the bowels were widely distended. There had been a slight passage, and the bowel was empty. The large intestine, from the middle of the transverse colon to the small intestine, showed traces of acute inflammation of an erysipelatou

have investigated thirty-nine different authorities, and have calculated the average proportion to be about one to eight. This includes Kiernan's cases. Neumann,* from not having seen a single case, denied the existence of paretic dementia among females. Sankey† inclines to the belief that sexual excess plays a part in the production of the disease, but the cases he cited show that there were, in addition to the sexual excesses, great vicissitudes.

Dickson ‡ favors the views offered by some writers, viz.: the liability, etc., but considers emotional mental strain as the great cause.

Luys || says that in existing social conditions males lead a much more active life than females, and are more subject to mental and emotional overstrain than females. Dr. Clevenger thinks the emotions preponderate in women, and even though carefully housed and cared for, nearly every woman has to bear at certain periods considerable tension of feeling, more probably in proportion to her possession of other mental qualities, which confer endurance.

Some authors state, the affection among the rural classes is markedly less frequent in females than is the case among the civic population, and is much more frequent with the hand-to-mouth, the trading and speculative classes, where the wife (Kiernan) takes an active part in her husband's business, than among the classes where she is confined at home. There is a marked relationship between the menopause and paretic dementia, as some writers have stated—there is a mental disturbance at this period predisposing to the psychosis. The prevalent type is the quiet form, which may account for the infrequency of its observation, and it is rarely met with among the female Irish in the South of Ireland.

In the discussion Dr. J. G. Kiernan stated, that even admitting females to be more emotional than males, when they are confined to their household duties, which are more monotonous than those of the male class of a speculative nature, the per-

* Lehrbuch der Psychiatrie, 1859.
† Lectures on Mental Disease.
‡ Medicine in Relation to Mind.
|| Maladies Mentales.

centage of cases among them is one to every 6 or 8 of males. In France there is a middle class (the Bourgeoise) where a wife takes an active part in her husband's business, and paretic dementia occurs in them. Regarding the ætiology, so far as alcoholic excesses go, statistics are worthless. In 160 cases reported, 116 were intemperate, but this is a symptom of the affection, instead of a cause. In British Guiana, where the people indulge in excesses of a sexual nature as well as the alcoholic, and also where syphilis prevails to a considerable extent, the disease is unknown, although at Berbes, where the asylum is located in British Guiana, the Superintendent reported one case, that of a male, who came there from Europe, and was afflicted with the malady ere he came to Berbes.

Some French authors state syphilis is not a predisposing cause, whilst Dr. Clevenger thinks paresis is very largely due to inherited or acquired syphilis.

Dr. R. Tilley thought if emotional strain had anything to do as a cause of this debility, that a Board of Trade speculator was much more apt to have it than a mechanic who gets his pay regularly, and yet in the large portion constituting the business class we scarcely ever hear of cases.

Dr. Kiernan stated he had no doubt but that the theory regarding emotional strain is true. The easy-going class in Ireland (Celts) do not have it, as may be illustrated by their not worrying as to how to prosper. In this city the emotional strain in those living from hand to mouth are the largest proportion who have this trouble; while Jessen, a Scandinavian alienist, traced all cases to congenital or acquired syphilis.

This topic being concluded, Dr. Henry J. Reynolds read an interesting paper on the "Treatment of Urethral Stricture."

Dr. W. L. Axford was much interested in the remarks embodied in the paper just read, and said the author took the extreme views advanced by Dr. Otis, of New York, and that the advances in urethral surgery to-day are due principally to Otis. In strictures of large caliber the best way to treat them is to cut them, as there is but little risk in doing so. In some cases of stricture, of traumatic origin, this method is hardly admissible, and Syme's operation is then preferable—external

Dr. S. V. Clevenger gave a report of a case of "Paretic Dementia" in a female, whose peculiarities justify a brief synopsis. Kate M., æt. 37, Irish; married; was admitted to the Cook County Insane Asylum, April 12, 1883. She had been very intemperate before the insanity was noticed by friends. October, 1881, furor appeared and lasted three weeks. She remained in St. Joseph's Hospital of this city till a remission occurred, lasting till December 25, 1881, when, as her family state, she had "cramps," which lasted a week. She was then sent to Detroit (Michigan State Retreat), where she remained until the latter part of July, 1882, and little was elicited concerning her last remission, except that she was errabund. The first remission, her friends claim, was complete. Just prior to admission in the Cook County Asylum, delusions of persecution were observed. She exhibited marked paretic symptoms, tremulous oral and lingual muscles from the day of admission. Speech drawling, tremulous; felt extremely well satisfied; had unsystematized delusions of grandeur. She gave little or no trouble till August 30, 1883, when hemiplegia followed a convulsion, and next day she died without having been roused from stupor. It was ascertained that her father had died of "consumption of the bowels," and that her mother at the age of 60 died paralyzed; also that this patient had never borne children, nor had she ever menstruated. An hereditary predisposition was denied. Necroscopy eight hours after death; uterus very small, resembling that of a child of 16; left ovary atrophied; os tincæ imperforate; vagina patulous and large. A third nipple, well developed, below the left breast. The brain weighed 39 ounces after preparation in solutions for microscopical examination; hence weights as here given have a relative value only. (The author is skeptical as to any importance attaching to absolute brain weights, and of late years will often omit weighing until the tissue is hardened.) Cerebellum weighed $4\frac{3}{4}$ ounces; each hemisphere weighed within a grain of $16\frac{3}{8}$ ounces. The left side then can be considered under weight. Cholesterin abundant, especially in occipito-basilar regions; right antero-posterior diameter of medulla slightly less than left. Isthmus weighed an ounce; vermis of cerebellum warped toward left side, causing left aspect of the organ to appear

larger than that of the right. Cortex did not pull off with pia mater loose from medullary substance, as noted in some cases by Spitzka. But in many parts of parietal and occipital regions the pial adhesions were sufficient to bring away the outer layers of cortex, imparting the ragged ulcerated appearance to which Rindfleisch called attention. Heterotopia found in anterior parietal region. Cortical pial adhesions occurred in the lowest extremity of the right occipital lobe, with connective tissue proliferations filling widened sulci.

This condition was extreme at base of first frontal convolutions on both sides, fibrous trabeculæ clubbed and twisted, extended downward from pia mater, covering four to five square inches, filling interstices left by shrunken gyri and atrophied gray substance. In the white substance, external to the right lobulous cuneus, a cone-shaped area of yellow softening with apex curved forward was found, measuring one inch in length, tapering from three lines in diameter. It was apparently the colloidal necrobiosis of a thrombosed terminal branch of the posterior cerebral artery. The gelatinous contents of the cone were mixed with detritus of the degenerated blood-vessel. Sections microscopically examined, afforded views of kinked and distorted vascular channels often twisted glomerularly. Knobbed vessels were frequent and perivascular spaces more so; some clear, others dotted with granular masses. Evidences of capillary stasis, general and decided, while dark bodies resembling embryo connective tissue corpuscles abounded. No well defined Meynert "spider-shaped" cells were discovered. The glanglionic elements were shrunken and their processes illy defined, a few large nerve cells with granule contents were observed lying in clear spaces, as though contracted from areas they once filled. Sclerosed patches abounded in the sections examined. With the exception of the lesions in the bregmatic region the post-Rolandiac parts were mainly involved. The ventricular endyma was nodulated in parts affording Spitzka's "ground glass" appearance. Comparatively few healthy ganglionic bodies were discerned in over a hundred sections taken from different parts of the cerebrum.

Remarks.—The frequency of paretic dementia occurring among women as compared with its occurrence among men. We

A visitor then mentioned a case under the care of Dr. Gunn, of a boy with contracted œsophagus caused by swallowing hot lye; rectal feeding had been employed exclusively for a year, no food having been taken into the stomach during that time.

Dr. Lyman had used broth and whey in rectal feeding before the day of beef peptonoids, which ought theoretically to be of great value.

Dr. Angear then in a few words mentioned the conflict in opinion and reasoning between physiologists and non-physiologists in the matter of rectal feeding. The rectal mucous membrane cannot digest albumen, nor change starch into sugar. These substances in the rectum only putrefy, show vibricæ, and decompose. Experiments made in Germany on patients operated upon for hernia, and having an artificial anues, show that the fluids of the large intestine will digest nothing; food placed there, at the end of a month had undergone no digestive changes, and the sharp edges of fragments of albumen were not rounded off.

Casein, fibrin, etc., are not absorbed, for digestion must first occur.

Fluids are absorbed slowly in the large intestine, about seven ounces in twenty-four hours.

Many do not stop to think how long a man will live absolutely without food;—sixty-three days is the longest time reported. Rectal feeding continued forty days is considered noteworthy, but the patient might live twenty days longer on nothing but water.

The doctor thought peptones produced irritation of the rectum, and inflammation enough to stop absorption, and destroy what little hope there may be left. In cases where rectal feeding has been honestly employed for long periods, food must have passed through the ileo-cœcal valve into the small intestine, and to bring this about, he advised using a long tube, small amounts of food frequently repeated, friction over the abdomen, etc.

Members present, about twenty, and several visitors.

The society on motion adjourned.

J. H. TEBBETTS, Secretary.

CHICAGO PATHOLOGICAL SOCIETY.

Regular meeting, January 14. The society was called to order by the President, Dr. Angear.

The Secretary being absent from the city, Dr. Tagert was appointed Secretary *pro. tem.*

The reading of the minutes was dispensed with.

The society then listened to the reading of a paper by Dr. Angear on "Expectant Treatment."

The paper being before the society for discussion, Drs. C. J. Lewis, Clark, and several others, mentioned cases, and thoroughly discussed the subject.

The society next listened to the report of the committee for microscopical examination of specimens from a case of intestinal obstruction, reported by Dr. Skeer at the previous meeting.

Examination showed the growth to consist of round-celled sarcoma, embryonic cells; it is rarely found in the alimentary canal, and is exceedingly malignant in nature.

About fifteen members were present.

The society on motion adjourned.

A. H. TAGERT, Secretary *pro. tem.*

In the February number of this journal, the name of Dr. W. H. Kane King, of Mt. Sterling, Brown Co., Ill., was accidentally not appended to his exceedingly interesting letter, dated from Chihuahua, Mexico. It chanced to be omitted from the manuscript, and was, unfortunately, not supplied by our proof-readers. We hope to present to the profession further interesting letters from the same fertile pen.

CHICAGO MEDICAL SOCIETY.

The Chicago Medical Society held a meeting on the evening of February 4, 1884. After the usual routine of business had been transacted:

color, with softening, shreds of exudation outside the intestine, and muco-purulent matter within. The case was an entero-peritonitis, with paralysis from inflammation.

The only assigned cause for this in a healthy child was, perhaps, the accidental fright the mother received just before birth, in saving a two year old child from a fall down stairs. In this case stercoraceous vomiting occurred before death.

Dr. Skeer then mentioned the case of a large stout man, 55 years old, who had stercoraceous vomiting for eight days. Partially relieved, he had a second attack, caused by an active cathartic, making two weeks in all, and had a complete recovery. In this case the abdomen was much contracted.

Dr. Angear thought local inflammation of the peritonæum occurred frequently, and unsuspectedly without inflammatory reaction. A man in the army died suddenly. Post-mortem examination showed adhesive bands and old traces of peritonitis, but doubted whether this had caused his death. The doctor assisted at a post-mortem in another physician's practice, recently, of a child sick only twenty-four hours, but had had all symptoms of perforation. Was at school, and had had no doctor. Examination showed the vermiform appendix bound down to the peritonæum by old bands, and the appendix full of a mass the size of a bean. There was here a small perforation, where matter had passed into the peritoneal cavity, and yet the child had shown no grave symptoms. Dr. Angear thought there might be frequently enough inflammation to do all this mischief and yet not lay up the patient, and he not even feel ill.

Some member inquiring about the methods employed by many undertakers to preserve bodies, Dr. Lyman replied that the material used by the undertakers and injected into the abdominal cavity and intestines through long, sharp trocars, would in a few hours produce appearances of ulceration.

Rectal feeding, announced as a subject for discussion, was next before the Society, and Dr. Robison first detailed an interesting case seen recently, of a young woman 22 years old, under treatment a week for excessive vomiting; well nourished and apparently healthy, no known cause could be assigned, unless from nervous prostration. All the usual remedies having been em-

ployed at the time he was consulted, he simply gave morphia, oxalate of cerium and bismuth, also lime water, but still without benefit, and the patient almost in collapse. The prostration was extreme, hence stopped all medication and gave rectal alimentation, injections of milk, brandy and water, also beef peptonoids, one tablespoonful in four ounces of water at each injection. In a few hours the vomiting ceased, strength began to return, and the patient greatly improved for five days, during which time no medicine or ordinary nourishment was administered; and the doctor thought complete recovery would have followed had not the friends, on their own responsibility, administered castor oil, starting anew the vomiting, and resulting in death in about six hours.

Dr. Van Buren had never placed much reliance upon rectal feeding. This case just cited would serve to create some confidence in the subject. For purposes of stimulation, he considered rectal administration of quinine, brandy, etc., very valuable, as in collapse of cholera.

Dr. Robison then spoke of a recent case in the practice of Dr. Ross, of nervous prostration, in which feeding by the mouth was stopped altogether and rectal feeding continued seven days, when he lost sight of the case, but had subsequent good report of the patient. Dr. Robison was unable to state the form of food used.

Dr. Skeer mentioned a case of gastric ulcer, with the following treatment. For three weeks the stomach was supplied only with white of egg, and rectal feeding employed, consisting of eight ounces of beef tea, and five grains quinine, three times a day. There was no fever and no great thirst, but during the last week considerable hunger between "meals," and the patient was strong enough to have gone down stairs if allowed. The doctor thought life could be prolonged and sustained indefinitely by nutrient enemata. In using quinine, it was well never to use muriatic acid to dissolve the drug, as it will start up an obstinate diarrhœa, as in the case of President Garfield. The bisulphate will dissolve readily, and is almost immediately absorbed. He did not use milk in the rectum, for though the salts and water are soon absorbed, the curd remains as an irritating material.

CASE II.—Some twelve years I was invited by Dr. Tousley, of Weyanwega, Wis., to see what he called a headless child recently born. I went with him and found the statement only partially true. The essential part of the head, the brain, was there, a part of its osseous covering alone being absent. It was a case of imperfect or arrested development of the cranial vault, a part of the frontal, temporal, parietal and occipital bones being wanting. They were absent from a line beginning a little above the supraorbital arch, passing backwards, arching slightly over each ear, aud passing through the occipital proturbance. The brain and its coverings were intact, the longitudinal fissure well marked, giving rise to two yielding tumors which the doctor at first mistook for the breech. The face was broad and flat, the nose flattened, the eyes small, round and protruding, probably from pressure upon the brain during labor. Every feature was distorted and repulsive in the extreme, the countenance resembling in some measure that of a hog.

The mother was a German, and she too had an explanation to offer. It was that some time after conception she came suddenly where hogs were being butchered, and saw a number of them decapitated. She was startled; hence, as she thought, her misfortune.

CASE III —While in Clinton, Wis., I was called to see a man who had fallen from the rafters of a house a story and a half high, striking against the joists and sleepers in his descent, and sustaining some injury about the back of the neck and between the shoulders. I removed his shirt to examine his injuries, and found an abrasion of the integument extending from the occiput to the second or third dorsal vertebra. The injury, though slight, looked bad at the time, the shoulders and upper part of the back being more or less spattered with blood. While stripped, his wife came to the place, and seeing her husband bleeding, became very much excited and alarmed. She was then in the third month of pregnancy. About four months later she prematurely gave birth to a child, on whose neck and between whose shoulders was a mark, the exact counterpart of the injury sustained by its father some months before. A triangular space extending from the occiput downwards between the shoulders was covered by a red-

dish membrane, presenting, in miniature, the appearance of the father's neck when seen by the mother. Reddish spots were scattered about the back and shoulders, corresponding to the blood stains on the father.

These three cases came under my personal observation, and the facts are truthfully given. Whether the maternal impressions and the subsequent morbid developments stand in the relation of cause and effect, or were mere coincidences, it is not my province to determine; but they seem to confirm the belief entertained by many, that Jacob knew whereof he bargained when he agreed with Laban to take as hire all the brown lambs and speckled goats and cattle born after a given date.

Discussion of moles, or maternal impressions, or mother's marks, was participated in by a number of the members.

Dr. A. Lagorio recited briefly the main points concerning a case he saw last April, although the woman who had been confined was attended by a midwife. A babe was born having double hare lip extending through the alæ of the nose. The nose was flattened; there was a cleft in the palate; the eyes were closed, and the lids could not be separated; there was no rotundity of the eyeballs. The child lived fifteen or twenty days, dying from inanition. At the autopsy there was discovered an entire absence of the eyes. The mother was 40 years old; an Italian. She had undergone during the period of gestation great hardships, such as scrubbing, using a pick-axe to remove stumps and roots; she also carried weights on her head, such as coal sacks. The poor woman supposed the midwife to be a witch, and it was her belief that her babe had been marked by the midwife just before its birth.

He believed there were no cases on record in this country where a child had been born without eyes, or where the lids could not be separated. In Vienna three cases have been reported where the eyes were missing, or where the eyelids were closed at birth. In one of these cases the lids were separated and the eyes opened, and subsequently the child perceived objects.

Dr. S. J. Avery gave a history of a case he had seen that may properly be regarded as coming under the subject discussed in the paper. Being called to attend a female patient about to be

ted was a surprise to him, for when he was called to see the patient the latter was suffering acutely from well marked symptoms of strangulation, yet within a few days the man recovered and resumed his duties attending a garden of which he was owner.

The second paper was read by Dr. L. A. Harcourt, who reported three cases of arrested fœtal development. In the most interesting case there was entire absence of the abdominal walls and the umbilical cord. A synopsis of the cases reported is hereby appended.

CASE I.—On the 4th of March, 1881, I was called to see Mrs. C., living on S. May St., in labor with her fifth child. Some months before, she had been threatened with an abortion, having had pain and hæmorrhage for several days; but rest and anodynes averted the calamity. I attended her at the time, knew she was pregnant, but did not look for her confinement so soon.

On examination in the present case, found the os uteri about two-thirds dilated, the membranes protruding into the vagina, but only a membranous tumor could be felt by the finger. Thinking there might be a breech presentation, and that instrumental aid might be necessary in the delivery of the head, I went for my forceps, a couple of blocks away, requesting the lady in the meantime to go to bed. Returning in a few moments, I found her in severe pain, the membranes protruding from the vulva, and as the pain subsided, I passed my finger beyond the tumor, which was a spina bifida, and distinctly felt the fœtal head. The os uteri being fully dilated, I ruptured the membranes at the next pain, and almost in an instant, the child was swept into the world with extraordinary force. I felt the warm blood gush on to my hand, and feared I had a case of post-partum hæmorrhage to deal with. A glance at the woman's face, however, banished my fear, and left me to look for some other explanation of the hæmorrhage. The blood came from another source, however. The child and placenta came into the world simultaneously. Looking at the child, which was alive, I saw its face grow white, and a second look revealed the fact that its abdominal parietes were wanting. The anterior and part of the lateral walls of the abdomen were absent, from a little above the os pubis to a little below the cuneiform cartilage, leaving the abdominal viscera ex-

pos.d. The intestines of course protruded, and the bladder, kidneys, stomach, and other organs could be distinctly seen and felt. The integument of the abdomen above, below, and laterally degenerated into membrane, and a membranous fringe from three-fourths of an inch to an inch and a half in width, resembling that attached to the placenta, and from which something had been irregularly torn, encircled the opening.

The lower extremities formed an obtuse angle with the body, the hips projecting to one side, as if the limbs of one fœtus had been engrafted obliquely upon the trunk of another. There was spinal curvature in the lumbar region. Altogether, it was something of a monstrosity, the sex of which I have forgotten. An examination of the child, the placenta, the vagina of the woman, and the bed, failed to discover the slightest trace of an umbilical cord. My impression is, that the membranes were attached directly to the child's abdomen, and were torn from it by the child's expulsion. The child lived only a few moments. The mother made a good recovery. She was not permitted to see the child until it was dressed, but knew there was something wrong, as no cord had been tied. She told me afterwards, in explanation of the abnormal condition of things, that, before she was threatened with an abortion, she had seen a man, who had fallen from a scaffold, whose abdomen was so torn that the intestines protruded from the rent, and who died in a few hours. The shock she received at the time, she thought caused an arrest of fœtal development, giving rise to the condition mentioned.

When called to the case, I was in attendance upon another lady whose labor was tedious, and to whom I was anxious to return; hence my examination of the fœtus before leaving was not as thorough as it ought to have been. On my return the child was dressed, and the afterbirth destroyed.

In the interest of science, I tried to get the child, offering to charge nothing for my services, if they would give it to me; but while the father seemed to appreciate my motives, he said, the mother would not listen to the proposition under any circumstances. Had I secured it, I would have written up the case long ago, and exhibited the fœtus to the society.

vise an operation. Regarding one speaker's interrogatory about stricture being a cause of sterility, he thought this was not the case; also that the bicarbonate of soda or potash, given for two or three days, was equally good with the citrate of potash to produce alkalinity of the urine.

The resignation of Dr. D. F. McPherson was accepted on account of his removal to Buffalo, N. Y.

Adjourned. L. H. M.

CHICAGO MEDICAL SOCIETY.

The following embodies the scientific proceedings of the meeting held at the Pacific on the evening of February 18, 1884.

The first paper was read by Dr. Wm. L. Axford, who gave a report of "A Case of Ventral Hernia," occurring in a male, and exhibited the large pathological specimen.

The following in brief is the report substantially as that given by the author:

It is my privilege to present before the society this evening a pathological specimen, removed post-mortem, from a very interesting case, which for a long period of time had been the subject of considerable doubt to a number of physicians. The history of the case is as follows:

F. B., aged 56, weight 340 pounds, an enormously large and fleshy man; had been troubled for the past twenty years by a tumor, situated above and to the left of the umbilicus. Did not know any cause for its appearance (having never received any injnry along the linea alba), which was at first that of a slowly growing tumor. He wore a pad for a number of years, and in this way was able to keep the mass within bounds, but during the past five years it became uncontrollable and had been a constant source of trouble, dating back to a very severe attack of constipation, followed by severe vomiting; in fact, so near as I can learn, at that time he had all the symptoms of a strangulated hernia. Two years before death another strangulation occurred, and at that time it was my good fortune to see him. In each instance the symptoms of strangulation seemed to have subsided under the use of opiates, with rest

in bed. In the intervals the patient had weekly attacks of what was described as a hardening of the mass; at such times it would increase to an enormous size, include the umbilicus in the swelling, and become extremely painful, but he did not vomit. He would go immediately to bed, and after a day or two of rest it would subside.

When I first saw the case, at the time it was strangulated for the second time, the tumor was about the size of an adult head, hard and tense, but resilient to the touch.

Percussion gave dullness over the upper and left part of the mass, while over the lower two-thirds the percussion note was tympanitic.

A number of diagnoses had been made by a variety of physicians, such as tumors of various kinds, particularly fatty tumor, hernia, hernia with fatty tumor, etc., etc. The physician who first treated the case evidently took it for a hernia, as he treated it by a pad, and controlled it for a long time. For my own part I believed it to be a ventral hernia containing intestine and omentum, thinking that the dullness over the left and upper part could be well accounted for by supposing that so large and obese a man would naturally have a thick, fatty omentum, which, from its anatomical relations, could easily occupy the left and upper portion of the hernial sac.

Two years later I received an invitation to assist at the autopsy, the patient having died with symptoms similar to those of the two previous occasions.

I now have the pleasure to present to you the sac of the hernia. No omentum was found in the sac; it contained small intestines alone.

In the discussion considerable contrariety of opinon was manifested regarding the use of a rubber bandage applied in treating this variety of hernia, as well as the utility of it in femoral, strangulated femoral, and other forms of rupture that occur in both sexes. Its advantage was affirmed by some and denied by others. It was also argued by one speaker that he personally had met a case of strangulated femoral hernia that recovered without sloughing or an operation, and that so far as he knew little or no treatment had been pursued, which result he admit-

perineal urethrotomy. The value of the acorn sound is greater in determining a stricture than that of the urethrometer, but to use the acorn instrument, the meatus may have to be incised. I want to ask the writer if he thinks in all cases of gleet there is stricture? Answered, yes. Then in all cases of stricture is there gleet? Answered, no.

Dr. C. E. Webster cited briefly a number of cases of stricture of large caliber he had seen operated upon. The first patient was in the first stage of pneumonia, and subsequently died of lung trouble. The second patient had organic disease of the heart, and died of the heart affection. A third case operated on had Potts' Disease. None of these patients were benefited by the operation. The same surgeon, who is a teacher in a well known school, operated for phymosis in a case of bow legs, expecting thereby to relieve this deformity, as no other treatment for the bow legs was recommended. Then the following two questions were asked the reader of the paper: First, whether he would operate upon a stricture of large caliber if no local symptoms were present; and second, whether acorn sounds of large size, which pass by dilating the urethra, may not indicate a stricture, where the condition is not pathological, but simply due to a varying degree of elasticity along the tract of a healthy organ?

Dr. C. T. Fenn gave his experience as a physician, (more than that of a surgeon) in introducing the finest sound, by reciting a case that not long since had been under his care. One of our well-known surgeons also saw the case with him in consultation: but in essaying to pass the smallest steel sound had failed, and then resorted to aspiration of the bladder over the pubes. He had previously, however, introduced a filiform bougie, and the passage was effected by "passing it around" the stricture, as was determined at the autopsy, when the stricture was dissected and found to be "fibrous," and in connection with it there was infiltration of urine, which caused death. The speaker did not agree with the author of the paper in wanting to operate on so many of this class of cases, and thought the operation should be approched with no little caution, as the dark urethral channel could not be seen whilst operating upon it.

Dr. R. Tilley asked the reader why he thought it was necessary in his cases to render the urine alkaline before operating? and why this is better than the normal urine, which is but slightly acid? Normal urine. he believed, was practically innocuous for wounds.

Dr. G. C. Paoli's experience and observation warranted his saying that only temporary benefit was derived from cutting operations, and that we should be very careful in making these incisions. Exudation takes place in two or three years at longest. He has treated between five and six hundred cases of stricture of the urethra by gradual dilatation. His patients were satisfied with this continual method, and all were successful, so far as he knew, without the cutting. He believed one should attain the object by the method of gradual dilatation, and that it is far preferable. He then gave a history of a case which was operated on 34 years ago in Cincinnati. There was considerable hæmorrhage at the time; temporary success followed, but in a short time the caliber of the canal become lessened and indurated. Every fortnight for a long period of time he passed a No. 8 or 9 Otis curve sound.

Dr. L. H. Montgomery thought stricture in the male a cause of sterility, and that the power of propagation was in many instances lessened by it, and inquired as to this; also of the writer, how long he required a patient to take an alkali, before the urine became alkaline, and if bicarbonate of soda in ʒss doses was not superior to the citrate of potash in rendering urine alkaline?

Dr. D. W. Graham said, that one of our eminent men in this city stated long ago, he thought a previous attack of gonorrhœa would cause sterility in the male. To cut a stricture is malpractice, and to cut what is revealed by an acorn sound, he regarded also to be malpractice.

Dr. Reynolds in closing said, he thought it was essentially necessary to dilute the urine, to do so, a patient will not void it so frequently, and in cystic irritation it should be rendered alkaline. In answer to Dr. Webster, he thought the condition to which he alluded would be extremely rare, a patient would not know he had stricture, unless local symptoms presented. For then a patient will consult me, and I probably should then ad-

confined he met with a breech presentation. All went on very well until delivery of the shoulders, which act, however, was accomplished, but with more than ordinary difficulty. In the delivery of the head, he discovered that this was hydrocephalic, and measured, he thought, eight or nine inches anteroposteriorly. In the delivery cephalotomy was performed. The mother recovered with no serious trouble or cellulitis.

Dr. J. G. Kiernan gave an abstract of a number of cases that had been reported in different journals and other literature upon this subject, purporting to be derived from embryologists. Some of the cases cited were very extraordinary. Men skilled in embryology have little doubt but that a sudden and violent mental shock may arrest development in a fœtus.

The Secretary knew that Dr. Harcourt's actual experience had been reported in the paper, and he had requested it might be presented to the society.

Adjourned. L. H. M.

DECISION UPON AN ANATOMY ACT.—The law of Maryland makes it a criminal offence to take bodies from the ground after burial for dissecting purposes, unless these bodies are buried in potter's field. "Last spring," says the *Maryland Medical Journal*, "three men were arrested for having in their possession bodies obtained from Bay View, and being tried before Judge Fowler, at Towsontown, were convicted. The counsel for the defense maintained that the Alms-house burying ground was a potter's field, and hence was excepted by law, but Judge Fowler did not entertain this opinion, and the prisoners were declared to be guilty. This decision was appealed from, and after several trials the question was finally settled by Chief Judge Yellott on Friday last, who said that 'any place where unclaimed paupers or strangers were buried was a potter's field,' and the prisoners were acquitted, after a confinement in jail of eleven months in one case."—*Medical Record*, March 8, 1884.

Domestic Correspondence.

TO THE EDITORS OF THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

Gentlemen: Recently I was accorded space in your journal for a statement in relation to the early history of the Cook County Insane Asylum and Poor House, in response to an article therein from the pen of Dr. Clevenger, of the present medical staff of this institution, in which the same was distorted and an injustice accordingly done to those formerly connected therewith as officials, together with myself as physician in charge.

Another article has appeared in your January number, which compels me to crave a further indulgence in your columns in the interests of fairness and of the profession. Reference is had to the case reported by A. W. Hagenbach, M.D., Superintendent of the Cook County Infirmary, under the head of "Ligation of Femoral and External Iliac Arteries," in which I am referred to as having made the primary amputation.

Without courting controversy with any of the students connected with the medical staff of this institution, a reference to this case on my part becomes excusable, if not, in fact, demanded. That I should be singled out again, and my practice and skill be made the subject of invidious comparison with that of the parlo scribes of a public institution is doubtless due to the proximity of my location as a practitioner. Members of the profession more distantly located are to be congratulated in escaping the annoyance to which I am being subjected. Situated near the point of convergence of several railroads, accidents necessitating amputations are of frequent occurrence, many of the patients proving to

belong to the class known as "tramps" or paupers. The result has been a contribution to me of a moderate line of surgical practice, by no means lucrative, and entirely unsolicited. Under such circumstances, it is most respectfully submitted that the amenities of the profession should not allow the operator to be deprived of the only compensation received in such cases, viz.: a fair recognition and treatment of his services performed.

Only a brief reference need be made to the history of the case in question as given by Dr. H. Its importance can be weighed with prescription scales.

According to the statement made by him, the patient in the case was received from me, after the primary operation, on "October 22, 1882." From this date to "October 26, 1882," no account of the condition of the patient is historically vouchsafed in the report. From thence to "November 9, 1882," covering a period of *fourteen* days, the profession is left without a word as to the condition and treatment of the patient, a degree of incompleteness unaccountable in the make up of a reported case designed to afford the least instruction to the profession. Under a course of subsequent treatment such as would be inferred from such a history, what reader, professional or otherwise, would make the slightest investment in the notion conveyed by the report as a whole, that the amputation as performed by me was such as that reasonable treatment and care thereafter would not have restored the patient? But, continues Dr. H., at this time "both bones protruded, and there was found a *large bundle* of silk ligatures cut close to the arteries, ligated at bottom of wound, etc." Allowing that there were but two arteries ligated, as would be usual in such cases, about what sized "bundle" would he claim "two silk ligatures cut close to the arteries ligated" makes? The most visionary stretch of fancy should not lead to such a reckless misapplication of terms. No surgeon has as yet been known to exhaust his entire stock of ligatures upon one patient, and such an event is not likely to occur.

A reference to my record of the case shows to a certainty that the patient was received by me, and the amputation performed immediately after the accident, on *November* 1, 1882, while claimed to have been under treatment at the infirmary from

"October 22, 1882," a period of *eleven* days prior to the accident! If the claim be true, then the patient must have been first received as a guest at the Poor House, and the doctor must have got his accompanying "bundle" as a pauper, confused with his subsequent "sutures" as a patient.

There is no disposition, however, on my part, to take any exceptions to the treatment bestowed upon the patient by Dr. H. covering that period prior to the accident and amputation. It was doubtless the best part of it.

In cases of this kind that may arise hereafter, after an amputation has been performed by me and a transfer of the patient to any public infirmary for treatment and care, I shall be disposed to claim a return of the patient if any difficulty is encountered thereat in effecting a permanent cure and restoration, but it must be done in season,and not after any lengthy experimentation upon the patient has been practiced.

In giving my version of the case reported, I beg leave simply to submit the following affidavits, which furnish their own explanation, and with the single observation that the object of this communication will be accomplished if my professional reputation shall be removed from under not a *cloud*, but a *shadow*,and medical literature hereafter be promulgated with a larger degree of fairness and accuracy. D. B. FONDA, M.D.

Dated at Jefferson, this 5th day of February, 1884.

STATE OF ILLINOIS } *ss.*
COOK COUNTY. }

I, David B. Fonda, being duly sworn, on oath say: That on November 1, 1882, at his office in Jefferson, Cook County, Illinois, he, as a physician and surgeon, performed an amputation of the left leg of one J. C. McMullen, being the same person thereafter committed to the charge of Dr. A. W. Hagenbach, Physician in charge of the then Cook County Poor-House, and the one made mention of by him in the January number of the CHICAGO MEDICAL JOURNAL AND EXAMINER; that the operation was performed by him in person and in presence of, and with the assistance of, Drs. C. W. Mercereau and W. Snyder, of Jefferson, and Mr. Fred. T. Franks, a student of medicine of Chicago, and on account of the following injury sustained by at-

tempting to alight from a moving freight train, on the Chicago and Northwestern Railway; at Plank Road Station, viz.: Compound comminuted fracture of the left tibia and fibula, necessitating the same, and in following manner, to-wit: The amputation was made in the upper portion of the middle third of the leg, with long posterior flap; that each of the arteries were separately ligated at the hands of Dr. Mercereau with silk ligatures, ONE strand of which, in each instance, was cut short at the point of ligation, the other carried external to the wound and fastened externally by an adhesive strap binding them to the anterior part of the leg, and as an auxiliary measure of protection; that the flaps were brought in apposition by five (only) interrupted sutures, and secured by adhesive strips and bandage; that the tourniquet was adjusted in manner to compress the popliteal artery, and left in position, with instructions to the person removing the patient to tighten the same in case bleeding should occur during process of removal, and for the purpose generally of guarding against accident from a possible secondary hæmorrhage: that a note from him to Dr. Hagenbach accompaned the patient, setting forth the above facts, and with a request that he take charge of and return the tourniquet after its use.

D. B. FONDA, M.D.

Subscribed and sworn to before me, a notary public, this 5th day of February. 1884. ISAAC N. HUESTIS.

[Notarial Seal.]

STATE OF ILLINOIS, } ss.
COOK COUNTY. }

I, Fred. T. Franks, being duly sworn, on oath say: That on November 1, 1882, I was present at, and assisted Dr. D. B. Fonda to perform, the amputation described in his affidavit, and that I do know of my own knowledge that it was done on the day, and in every particular in manner and form as described and set forth in his affidavit. FRED. T. FRANKS.

Subscribed and sworn to before me, a notary public, this 5th day of February, 1884. ISAAC N. HUESTIS.

[Notarial Seal.]

STATE OF ILLINOIS, } ss.
COOK COUNTY. }

I, C. W. Mercereau, being duly sworn, on oath say: That on November 1, 1882, I was present at and assisted Dr. D. B. Fonda in performing the amputation described in his affidavit; that I ligated the arteries in manner as described by Dr. Fonda, and that the amputation was made the day, and in manner as therein described. C. W. MERCEREAU.

Subscribed and sworn to before me, a notary public, this 5th day of February, 1884. ISAAC N. HUESTIS.

[Notarial Seal.]

BURLINGTON, IOWA, March 12, 1884.

MESSRS. EDITORS:—I take the liberty of communicating to you a fact corroborating a statement made by Dr. Lagorio at the meeting of the Chicago Medical Society on the 18th inst.

Two years ago, while visiting a patient a short distance in the country, my attention was called to a newly born blind calf. It was perfect in every way, with the single exception that it had no eyes and no place for them. There was no depression in the skull where the orbits should have been.

I have also in my possession the head of a pig, with a single large eye in the center of the forehead. There is a projection over it, of a cylindrical portion of the integument resembling the penis of a boy. There is, however, no aperture in the latter.

I should have mentioned that the calf was suckled well, and the farmer sold it to a butcher, who had served it out as veal before I could secure the specimen.

Yours truly,

G. R. HENRY, M.D.

Reviews.

INSANITY AND ITS TREATMENT. By SAMUEL WORCESTER, M.D. New York: Bœricke & Tafel. 1882. Cloth, $5.

INSANITY: Its Classification, Diagnosis, and Treatment. By E. C. SPITZKA, M.D. New York: Bermingham & Co. 1883. Cloth, $3.

A TREATISE ON INSANITY IN ITS MEDICAL RELATIONS. By WILLIAM A. HAMMOND, M.D. New York: D. Appleton & Co. 1883. Cloth, $5.

PSYCHOLOGICAL MEDICINE. By E. C. MANN, M.D. Philadelphia: P. Blakiston & Co. 1883. Cloth, $5.

MEDICAL JURISPRUDENCE. By A. Mc. L. HAMILTON, M.D. New York: Bermingham & Co. 1884. Cloth, $5.

The progress and features of American psychiatry in the last few years have been decidedly flattering to nativistic physicians, and the works just enumerated are striking illustrations of the various phases of thought which are to be detected in the medical world on this subject. The first work is a very fair condensation of the older American and more recent European literature. It is written by a homœopathic renegade from the regular profession, and the only original feature about the book is the decidedly original ideas as to the purpose of therapeusis. Chloral hydrate is recommended in thirty grain doses, and other drugs in equally large doses; in case homœopathic therapeusis fails, for the purpose of preventing "the patient passing into the hands of the old school profession." If the therapeutic vagaries were removed, the work would be of no little value.

The second work is by a very well known physician. It is up to the times. It is well written, but cannot be skimmed; it must be studied. The classification adopted is modified from that of Krafft-Ebing and in the opinion of Tamborini, one of the leading Italian alienists, (no mean authority), is a decided improvement on that classification. Like everything scientific, it is not simple, but requires careful study. American alienists are quoted at length. While the author has thus done unusual justice to the alienists of his native land, he has not neglected those of Europe. A perhaps objectionable feature is the severely critical analysis to which the author subjects the writings of persons made alienists by the grace of politicians. Reference is made to the much neglected question of simulation of insanity, and concealment of insanity by the insane. The classification of the author is as follows, divesting it of its generic and specific relations: "Mania, melancholia, katatonia, transitory frenzy, stuporous insanity, primary and secondary confusional insanity, primary deterioration, terminal dementia, senile dementia, hebephrenia, paretic dementia, luetic dementia, dementia from coarse brain disease, delirium grave, alcoholic, hysterical, epileptic and periodical insanities, idiocy, imbecility, cretinism, monomania, traumatic, choreic, post febrile, rheumatic, gouty, phthisical, sympathetic and pellagrous insanities." It will be obvious that this is well adapted for clinical purposes. The book is a sound, practical, scientific guide in the study of psychiatry.

Dr. Hammond's work makes an attempt to demarcate between legal and medical insanity. The best legal minds have concluded that what is fact in science cannot be fiction in law; and, viewed from this standpoint, Dr. Hammond's views are, as has been said by the *Alienist and Neurologist*, a weak compromise with error. The classification of Dr. Hammond is complex, and, it must be confessed, inconsistent. It is as follows: 1. Perceptional insanities, in which there are derangements of one or more of the perceptions. A, illusions; B, hallucinations. 2. Intellectual insanities, in which the chief manifestations of mental disorder relate to the intellectual being of the nature of false conceptions, or clearly abnormal conceptions. A, intellectual monomania with exaltation; B, intellectual monomania with depression; C,

chronic intellectual mania; D, reasoning mania; E, intellectual subjective morbid impulses; F, intellectual objective morbid impulses. 3. Emotional insanities, in which the mental derangement is chiefly exhibited with regard to the emotions. A, emotional monomania; B, emotional morbid impulse; C, simple melancholia; D, melancholia with delirium; E, melancholia with stupor; F, hypochondriacal mania or melancholia; G, hysterical mania; H, epidemic insanity. 4. Volitional insanities, which are characterized by derangement of the will, either by its abnormal predominance or inertia. A, volitional morbid impulse; B, aboulomania (paralysis of the will). 5. Compound insanities, in which two or more categories of mental faculties are markedly involved. A, acute mania; B, periodical insanity; C, hebephrenia; D, circular insanity; E, katatonia; F, primary dementia; G, secondary dementia; H, senile dementia; I, general paralysis. 6. Constitutional insanities, which are the result of a pre-existing physiological or pathological condition, or of some specific morbid condition affecting the system. A, epileptic insanity; B, puerperal insanity; C, pellagrous insanity; D, choreic insanity, etc. 7. Arrests of mental development. A, idiocy; B, cinism. It is quite unnecessary to do more than quote this classification, to show that it is somewhat inconsistent. The classification is a stumbling block, rather than an aid. The descriptions of the generally accepted forms are models of excellence. The work, as a whole, can be recommended as a good guide in clinical psychiatry, but contains unsound and dangerous opinions on legal medicine, as it enunciates doctrines opposed, as even its author admits, to abstract justice.

The first thing about Dr. Mann's book which strikes the reader, is its illy digested character. It looks as if it had been "scissored" from the author's contributions to periodical literature. It is, when carefully sifted, a good guide in clinical psychiatry; a poor one in pathological histology, since the changes produced by manipulation are not guarded against. The work enunciates sound views in legal medicine. Carefully edited and skilfully condensed, it could be made a good text-book. Its chief faults are that it lacks clearness and system.

The last work has all the faults of Dr. Mann's book, and none

of its virtues. Its author is not acquainted with the fact that the insane feign insanity. He is unacquainted with many more facts an alienist ought to know. The book is worthy of the author, who has declared upon the witness stand that "if the insane knew right from wrong, and *could* not control themselves, they should be punished the same as the sane."

Three of these works are desirable acquisitions. Spitzkas book requires brain work in its perusal, but, its general principles grasped, proves of great value. Hammond's work is easily perused, readily assimilated, but is not a very safe guide in practice, because of the exceptional views of its author. Dr. Mann's book, from its lack of system and prolixity, requires equal labor in its perusal with that of Dr. Spitzka, and this labor is not as well rewarded. Worcester's book is valueless because of its *dishonest* therapeutic views, while Hamilton's book has all the vices of the works of Hammond and Mann in a greater degree than either, and none of their virtues, and displays the erratic views of an author who proclaims that a *low* facial angle is a sign of intellectuality. JAS. G. KIERNAN.

THE HOT WATER CURE.—A writer in the *Lancet* (Dec. 29) gives his experience of hot water as a curative agent in indigestion, for which he has suffered for many years, and by the judicious use of which he has been relieved. He says half to a teacupful of hot water (not boiling nor yet lukewarm) sipped before a meal will enable nine out of every ten sufferers from indigestion to digest that meal with comfort; and in cases where a fulness and uncomfortableness are felt after a meal, a similar quantity taken in a similar manner will give relief.—*Maryland Medical Journal.*

THE names of two distinguished Western physicians are inscribed to-day on the long roll of the majority, Dr. Lunsford P. Yandell, of Louisville, and Dr. George Englemann, of St. Louis. Each of these gentlemen had won a brilliant reputation in the profession; and each had an authority that was respected, not only in this country, but abroad. We can ill afford to lose the lustre of these names from the list of eminent professional men in the West.

Editorial.

ANTISEPSIS FROM THE LATER STANDPOINT.

It is within the memory of most medical men that for a healthy healing process a certain degree of inflammatory action was regarded as the main requisite in and about a wound. The only provision was that the inflammatory process should be limited in degree. Such expressions as "the accompanying inflammation will soon glue the parts together;" and "all wounds must inflame," were often used as descriptive of the natural history of wound repair. But antiseptic surgery has shown that the slightest process of inflammation in wounds, is the cause of delay in repair. The redness, heat, œdema, and pain are only evidences of putrefaction and fermentation of the wound discharges. They are the protests of nature against the entrance of this material into the general circulation. With the fermentation come myriads of micro-organisms of the bacterial order, the latter related to the former as cause and effect. To-day, the surgeon's principal aim is to prevent this poisoning of a wound. He desires to secure healing without inflammation, without pus formation, without pain, and by first intention. This result is only attained by antiseptic practice. The method of antiseptic practice is now largely a matter of taste.

If the principle be faithfully and honestly kept in mind to prevent septic infection through the air surrounding the patient, the water with which his wounds are bathed, and the hands, instruments, and appliances by which the necessary surgical manipulations are made, the end is reached. It is, beyond question, the duty of every practitioner to render himself familiar with the

technique of the processes and appliances necessary to render every wound aseptic. No better plan can be adopted than a careful study and familiarity with the details of Listerism, the purest and best of all antiseptic methods. From this method departures to those which are simpler can then be safely made. It is well enough to speak of cleanliness and perfect rest in wound treatment, but neither of these can be attained without absence of fermentation, absolute control of all hæmorrhage, perfect drainage, and close coaptation. The accumulation of wonderful results in surgical practice following the introduction and adoption of the principles of antiseptic surgery, as formulated by Mr. Joseph Lister, steadily increases. Compare the results of gunshot wounds of joints during our late war, and those obtained by Carl Reyher in the Russo–Turkish war. Of 18 patients reported by Reyher treated antiseptically, 15 recovered with mobile joints, 3 only dying. With us the rule was almost certain death or amputation. Reyher also gives 40 patients operated upon and manipulated without antiseptic precautions, with 34 deaths and 6 recoveries. Of these 5 lost their limbs. He also gives 23 patients left to themselves, all of whom died but one.

Nearly every text-book condemns the victims of penetrating gunshot wounds of joints to amputation of the limb. Antiseptic surgery and fixation, together with rigid abstention from disturbance of the wounds with septic fingers and probe save nearly all, and these frequently with mobile joints. It is here surely that the too inquisitive surgeon furnishes the straw which breaks the back of nature. These are only a few among a large number of revolutions in the management of dangerous wounds that have been wrought by this special practice, but these alone are so striking as to cause those to blush who still sneer at the notions of antiseptic work, and go on in the old method of slovenliness, dirt, and death. A Lister dressing is costly, and possibly cannot be adopted in universal practice. Many other methods safely take its place, and some are cheap, found everywhere, and capable of being used in the most adverse circumstances with such materials as aseptic sawdust, shavings, sugar, dried earth, and other absorbent substances. A solution of corrosive sublimate 1 to 2,000 ($7\frac{1}{2}$ grs. to water 1 qt.) thoroughly incorporated with any of these

substances will furnish an absorbent antiseptic dressing sufficient to answer every purpose of cleaning wounds and prevention of fermentation and putrefaction changes with their long train of ills and woes. Equally good results often follow the use of the dry dressings with antiseptic cotton, or tow, or oakum. The only fact to be borne in mind is the necessity of recognizing the imperative importance of the aseptic condition and the adoption of the best methods circumstances will allow. When military field surgery, with antiseptic care and treatment presents a mortality of only 16 per cent. in the wounds heretofore most dangerous of all, the percentage of civil surgery ought certainly to be expressed by the single and smallest numeral.

A CERTAIN American was dyspeptic in London, and went to consult the great doctor, Abernethy, who was one of the brusquest men that ever lived, but a first-rate physician. "What's the matter with you?" asked Abernethy. "Why," replied the American, "I presume I have the dyspepsy." "Ah!" said he, "I see; a Yankee—swallowed more dollars and cents than he can digest." "I am an American citizen," was the reply, "and I am Secretary of Legation at the Court of St. James." "When did you arrive?" "Three days ago." "Ah! then you will soon be cured of your dyspepsia." "How so?" "Well, in the company you'll be obliged to keep you'll have to eat like a Christian." The gentleman did not know Abernethy's peculiarities, and made some sharp reply, on which Abernethy broke out: "I'll be hanged if I ever saw a Yankee that didn't bolt his food whole like a boa constrictor. How the d—l can you expect to digest food that you neither take the trouble to dissect nor the time to masticate? It's no wonder that you lose your teeth, for you never use them—nor your digestion, for you overload it—nor your saliva, for you expend it on the carpets, instead of on your food. It's disgusting. You call it dyspepsia; I call it guzzling. If you take half the time to eat you do to drawl out your words, and chew your food half as well as you chew your tobacco, you would be well in a month." And Abernethy was right.—*Vanity Fair.*

Miscellaneous.

BOOKS AND PAMPHLETS RECEIVED.

BOOKS.

A Manual of Pathology. Coates. Philadelphia: Henry C. Lea's Son & Co. Jansen, McClnrg & Co.

Insanity in its Medico-Legal Relations. T. Buckham. Lippincott & Co. Jansen, McClurg & Co.

Venereal Diseases. Bumstead& Taylor. H. C. Lea's Son & Co Jansen, McClurg & Co.

Chemistry, Medical, General, &c. Attfield. Lea's Son & Co. Jansen, McClurg & Co.

Chemistry, Organic, Inorganic, &c. Bloxam. Fifth Edition. Lea's Son & Co. Jansen, McClurg & Co.

Manual of Practical Hygiene. Parkes. 2 Vols. Wm. Wood & Co. W. T. Keener.

Training Schools for Nurses. Notes on Twenty-two Schools. W. G. Thompson. Putnam's Sons. Jansen, McClurg & Co.

Hand-Book of Therapeutics. Ringer. Tenth edition. Wm. Wood & Co. W. T. Keener,

Materia Medica and Therapeutics. Bartholow. Fifth edition. W. T. Appleton & Co. Jansen, McClurg & Co.

Manual of Psychological Medicine. Edward C. Mann. Blakiston, Son & Co. W. T. Keener.

A Treatise on Syphilis in Children and Infants. P. Diday. Translated by Whitley. Wood & Co. W. T. Keener.

Medical Ethics and Medical Etiquette. A Symposium from the Liberal Standpoint.

Elements of Histology. Klein. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Manual of General Medical Technology. Edw. Curtis. Wm. Wood & Co. W. T. Keener.

Transactions of the College of Physicians. Third series, Vol. VI. P. Blakiston.

Index to Transactions American Medical Association. Vols. I to XXXIII. W. B. Atkinson, Sec'y.

Parrish's Treatise on Pharmacy. Wiegand. H. C. Lea's Son & Co.

Legal Medicine. Tidy. Vol. II. H. C. Lea's Son & Co. Jansen, McClurg & Co.

St. Bartholomew's Hospital Reports. Vol. XIX., 1883. Smith, Elder, & Co., London.

Transactions American Surgical Association. Vol. I., 1881 to 1883. P. Blakiston, Son, & Co. W. T. Keener.

Surgical Diagnosis. Ranney. Third edition. Wm. Wood & Co. W. T. Keener.

Preventive Medicine. Richardson. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Opera Minora. Seguin. G. P. Putnam's Sons. Jansen, McClurg & Co.

A System of Oral Surgery. Garretson. J. B. Lippincott & Co. S. A. Maxwell & Co.

Diseases of the Spinal Cord. Gowers. P. Blakiston, Son & Co.

Diseases and Injuries of the Horse. Kirby. Wm. Wood & Co. W. T. Keener.

Legal Medicine. Tidy. Vol. III. Wm. Wood & Co. Cheap series for 1884. W. T. Keener.

Applied Surgical Anatomy. Treves. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Elements of Surgical Pathology. A. J. Pepper. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Elements of Human Physiology. Power. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Clinical Chemistry. Ralfe. H. C. Lea's Son & Co. Jansen, McClurg & Co.

The Dissector's Manual. Clarke. H. C. Lea's Son & Co. Jansen, McClurg & Co.

Influence of the Mind on the Body. Tuke. Second Am. from second Eng. edition. H. C. Lea's Son & Co. S. A. Maxwell & Co.

Voice, Song and Speech. Browne & Behnke. G. P. Putnam's Sons. Jansen, McClurg & Co.

Female Hygiene and Female Diseases. J. K. Shirk. Lancaster Publishing Co.

PAMPHLETS.

Transactions of the Massachusetts Medico-Legal Society. Vol. I., No. 6.

Concealed Insanity. (Case of Mary Gray). Brower.

Study of Neglected Lacerations of the Cervix Uteri Ashby.

A Tracheotomy Tube for Gradual Withdrawal. Hendrix.

Antipyretic Treatment of Typhoid Fever. Smythe.

Alcoholic Insanity. Mason.

Treatment of the Pedicle in Ovariotomy. Sutton.

Treatment of Syphilis. Sims

The Cholera Scare. J. W. Reilly.

Human Parasites. Goding.

Serpiginous Phagedena. Scott.

The Mental Status of Guiteau. A Review. McBride.

Infusion of Jequirity in Inveterate Pannus. Peck.

Outline of the History, Theory, and Practice of Quarantine. Jones.

Medical Education in the United States and Canada. Illinois Board of Health.

Intestinal Obstruction and Operation. Parkes.

Laceration of the Cervix Uteri. Harvey.

Purulent Inflammation of the Middle Ear. Peck.

Diagnosis of Ovarian Tumors. Borck.

The Electro Osteotome. Roberts.

Training and Education of the Feeble-Minded and Imbecile. Davis.

General Paralysis of the Insane. McFarland.

Management of Enteric Fever. Wilson.

Delayed and Non-Union of Fractures. Senn.

Increase of Insanity in the United States. A Study of the Tenth Census. Pratt.

Address to the Medical Class at Dartmouth College. Elsberg.

Annual Report of the Surgeon-General U. S. A., 1883.

New Mode of Operating in Fistula in Ano. Jenks.

Report of the Section on Dental and Oral Surgery of the American Medical Association.

Jequirity in Granular Eyelids. Hotz.

Annual Report of the Librarian of the American Medical Association. Kleinschmidt.

Leprosy in Minnesota. Grönvold.

Arrest of Development from Uterine Pressure. Hendrix.

Study of a Case of Multiple Sarcoma of the Skin. Hyde.

Medical Symbolism. Sozinskey.

Perinephritic Abscess. Roberts..

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Original Communications.

ARTICLE I.

THE PHILOSOPHY OF MANIPULATION IN THE REDUCTION OF HIP AND SHOULDER DISLOCATIONS. (From the Transactions of the American Surgical Association. Annual Session of April 30, May 1, 2, and 3, 1884, Washington, D. C.) By MOSES GUNN, M.D., LL.D., Prof. of Surgery, Rush Medical College.

Mr. President and Fellows:

It is now a third of a century since Dr. Reid, of Rochester, N. Y., proposed a definite method of manipulation for the reduction of the upward and backward dislocation of the femur.

By his method he sought to overcome the resistance which certain structures, in his estimation, offered to the reduction; and, although he was in error as to the particular structures offering such resistance, he is entitled to the credit of original and thoughtful investigation of the subject, and the proposal of a definite method of manipulation. Wonder is also aroused that, while his investigations carried him so near the exact truth, he failed to recognize and grasp it. On this point I shall dwell at a more advanced stage of this paper.

After the publication of Dr. Reid's paper in the "Transactions of the Medical Society of the State of New York, 1852," there

were numerous contemporaries who failed to see anything new or original in his method, and they called attention to the practice of Dr. Nathan Smith, of New Haven, who was in the habit of reducing dislocations without extension and counter-extension, simply by certain movements, and without the exercise of great power. Other authorities were also cited to prove that the reduction of dislocations by manipulation was not new, the critics overlooking the fact that Dr. Reid's method was a definite plan to overcome the resistance offered by certain *recognized* agents, and not a mere manipulation having only a general result in view.

Exactly what Dr. Smith's method was seemed not to be known, even by those who had sat at his feet. That, however, he reduced dislocations by manipulations of some sort, was satisfactorily established.

Since the publication of Dr. Reid's paper, and the discussions which it occasioned, the practice of manipulation in the reduction of dislocations, not merely of the dorsal variety in the hip, but of all dislocations of both hip and shoulder, has become frequent, though by no means general. The manipulations, too, are often practiced somewhat vaguely, without a clear conception of the nature of the difficulties to be overcome.

The purpose of this paper is to discuss these difficulties and the methods best calculated to prevail over them, and if in so doing I shall dwell somewhat at length upon my own thought, investigation, and teaching, in reference to this subject, during a period dating from the publication of Dr. Reid's paper, I trust that your indulgence will acquit me of an undue display of egotism.

Previous to the publication of Dr. Reid's article, the opinion was, probably, universal, that muscular action or spasm holding the dislocated member in its abnormal position, constituted the resistance to our efforts, and the obstacle to be overcome in reducing hip and shoulder dislocations. Hence the continuously prolonged extension, for the purpose of tiring out the muscles. Hence, also, in supplementing the effect of such efforts to overcome muscular action, bloodletting, tartrate of antimony, and various other means of diminishing muscular energy, were often invoked.

Dr. Reid, however, recognizing the fact that muscular action was easily enough overcome in cases of fracture of the neck and trochanteric portion of the femur, and that muscular action could not be present in his experiments on the cadaver, sought for the resistance in the physical tenacity of the muscular structures about the joint. In this idea of Dr. Reid, we have a recognition of the physics of the dislocated condition, disassociated from physiological activity. I have already given expression to wonder that Dr. Reid failed to grasp the whole of this physical potency, overlooking its major part, when in one of his experiments it was thrust so prominently before him. In detailing this experiment, which was upon the cadaver, he says :

" * * * * although all the muscles about the joint were separated from each other, were loose, without vitality, and almost in a state of decomposition, yet it was with great difficulty that we could bring down the head into its socket; and when we did so, we carried away a part of the capsular ligament."

The significance of the fact stated in this last clause was lost to the observer, as it was, also, to me in the first reading of the article; for not until a reperusal of the paper seven years subsequent to the first reading, when I had in the meantime fully elaborated the views which I shall advance in this paper, did its significance challenge my attention. In his efforts at reduction he *carried away a part of the capsular ligament;* the reduction was not effected till the *ligament was sacrificed:* and yet he saw no obstacle to the reduction except in the *half rotten muscles* which, he says, " constitute the real and only impediment."

Stimulated by Dr. Reid's article and by the demands of the surgical chair which, in consequence of my then youthful age, I was earnestly striving to fill, in the equally youthful University of Michigan, I began a careful investigation of the subject, and at an early period in my experiments, I recognized in the untorn portion of the capsular ligament the structure which held the head of the dislocated femur or humerus more or less firmly locked in its luxated position, and thus constituted the great and principal, if not the only, impediment to be overcome in reducing a hip or shoulder dislocation. In a paper which I read before the Detroit Medical Society, and which was published in

the *Peninsular Journal of Medicine* in September, 1853, I used the following language:

"What structure stood between effort and success? I answer, *the untorn portion of the capsular ligament.* * * * * Extension and counter-extension by the pulley or Jarvis's apparatus in the usual direction, succeeds only by lacerating much more extensively, if not by tearing the ligament completely asunder, before the head will ride over the edge of the cavity. The principle, then, I would seek to establish is this: *that in luxations of the hip and shoulder, the untorn portion of the capsular ligament, by binding down the head of the dislocated bone, prevents its ready return over the edge of the cavity to its place in the socket; and that this return can be easily effected by putting the limb in such a position as will effectually approximate the two points of attachment of that portion of the ligament which remains untorn.*"

In an extension and republication of this paper, six years later, I added to the above principle the following:

"For the easy reduction of a dislocation, the dislocated limb should be placed in exactly that position which characterized it at the moment of escape of the joint end from its normal position in the joint."

These two principles constitute the key to the whole subject of manipulation in the reduction of dislocations; and the first, viz. that which refers to the untorn portion of the ligamentous capsule is fully vindicated by Professor Bigelow in a work on the Hip, published in 1869. This distinguished surgeon and teacher, however, as is well known, dignifies the reinforcing fibers of the ilio-femoral ligament by giving to it (the ilio-femoral) distinct individuality, and applies to it the term "Y ligament." The correctness or propriety of this particular anatomical individualization need not be dwelt upon in this connection. To that part of the anterior portion of the capsule which is covered and strengthened by these fibers which blend with the capsular structure, he limits the potency which gives the characteristic deformity to the various dislocations of the hip, and which, he thinks, opposes our efforts in reduction by the old method of extension and counter-extension.

This portion of the capsule is, manifestly, much the strongest, and is probably rarely torn asunder in any of the four classical dislocations, except the thyroid, in which it is, probably always, completely ruptured, as I shall have occasion to demonstrate in the course of the present paper. Its entire want of influence in the dorsal variety of dislocation I shall also be able to show by exhibition of a dissection of the parts.

This is the portion of the capsule which Professor Bigelow claims to remain untorn in all hip dislocations; and his manipulations are so directed as to effect its relaxation, thus coinciding with the first of the two general principles above named. These principles I shall endeavor to elaborate, illustrate, and apply.

Before, however, proceeding to this branch of my subject, I desire to direct attention to another structure which plays an assisting rôle in holding the head of the femur down outside the ridge of the acetabulum in the dorsal dislocation. If, in an intact state of the muscles and the external portion of the fascia lata, the capsular and round ligaments be completely divided, and the head of the femur be luxated upon the dorsum of the ilium, it will be found that the characteristic deformity of direction in the limb will be wanting, *i. e.* the limb will be parallel with its fellow, on a line with the trunk lacking the inversion and adduction, but will be shortened the usual extent. If now the limb be placed in the position characteristic of dorsal luxation in the living subject, and the reduction be attempted by the old method of extension and counter-extension, it will be found that the head is still held down firmly in its hooked position outside of the ridge of the acetabulum. It is thus held by the fascia lata, which in this position of the limb describes the outermost curve, and consequently is put upon the stretch and holds the whole trochanteric end of the bone pressed firmly inwards. But by taking care to rotate the limb well inwards, so as to avoid the pressure of the fascia lata upon the great trochanter, a moderate amount of extension will draw the head into the socket. Hence, in all manipulations for the reduction of the dorsal or ischiatic dislocations, the limb should be kept well rotated inwardly.

Let us now first proceed to a consideration of the last of the above-named principles, viz.: that which calls for the putting of

the limb in the position which characterized it at the moment of escape. It is often impossible to obtain direct and positive evidence on this point, either from the patient himself or from the witnesses of the accident; but occasionally we are more fortunate, and the evidence of these fortunate occasions is of great value in estimating the probabilities in cases when positive evidence is wanting. It is rare that dislocation of a healthy and perfect shoulder-joint will occur except in a distorted position of the humerus at the time of the escape of the head from the glenoid cavity, and it is not probable that a dislocation of a healthy and perfect hip-joint can ever occur except in a very distorted position of the femur at the moment of escape. In the hip-joint of average perfection, it is tolerably certain that either pretty extreme adduction, abduction, internal rotation, or external rotation must be present before a dislocation can take place. I lay down the rule with full confidence in its correctness, that so long as the femora are parallel with one another, on a line with the longitude of the trunk, and midway between eversion and inversion, violence may effect a fracture, but not an uncomplicated dislocation. Before a dislocation can occur, an extreme degree of distortion in one, and sometimes two or more of the above-named directions, must be present. For instance, in the dorsal dislocation the femur must be adducted, flexed, and internally rotated before escape is possible. In the thyroid form of the accident, extreme abduction and moderate eversion must preëxist. In the backward form, flexion at about a right angle with the body, associated with extreme adduction, or, if flexion and adduction are not present, extreme internal rotation, must characterize the position of the femur at the instant of the escape. In the pubic luxation, extreme eversion, with probable moderate abduction, antedates the escape of the head from the socket.

Illustrative evidence in support of these assumptions is frequently at hand in the manner in which the accident occurred. Thus, the man who in falling from a height struck upon the foot in an adducted position of the limb, by which the limb was still more powerfully adducted, sustained a dorsal dislocation.

A mechanic, in a sitting position before a car platform, had the car suddenly moved toward him, striking the knee and tilting

the pelvis so as to produce relatively a strongly adducted position, added to the right-angled flexion of the limb incident to the sitting position, and he sustained a backward dislocation.

A lad fell before a low-wheeled stone-truck, which passed over him, and to which he was forced to enact the part of roller, whereby, undoubtedly by pressure on the trochanter, he had the limb forced into an extreme position of external rotation, and he was picked up with pubic dislocation.

A man slipped outward on one foot, coming down with the leg forced outwards to a condition of extreme abduction, and he sustained a thryoid dislocation. Such examples, quadrating accurately with mechanical principles, strongly attest the correctness of the positions above assumed.

In the shoulder joint, owing to the shallowness and relatively small size of the glenoid cavity, this rule of distortion antedating dislocation does not necessarily obtain, but we know that it is, frequently, not only present, but is, also, the proximate cause of the accident. For instance, direct violence, operating from a direction outward upward upon the head of the humerus, may produce the axillary dislocation; and a variation in the direction of the force, from outwards and forwards, or from outwards and backwards, may produce either the dorsal or thoracic displacement; but more frequently we are furnished with demonstrative evidence of the fact that extreme distortion is one of the actual and proximate causes of the luxation.

Thus, the axillary dislocation is generally caused by the suddenly enforced position of the arm upwards by the side of the head, while the forward luxation is usually produced by falling backward, the arm being thrown backward to break the fall; and the backward displacement is effected in a similar manner, by throwing the arm forward to break a plunging fall in that direction.

Now, it is certain that in the position in which the limb was at the instant of escape, that escape was entirely consistent with the existing condition of all the structures about the joint; and, in the same position, the joint end of the dislocated bone ought to travel back with equal facility, by a simple reversal in the direction of the force.

The exception to this position will be found in rare cases,

where by a simple splitting of the fibers of the capsule, a button-hole form of laceration occurs which grasps the neck of the completely escaped head. This condition, when it is encountered, requires something more than manipulation; more extensive rupture must be effected.

But, in ordinary cases, it is evident that the position which facilitates or permits the escape, will also be favorable to the return of the escaped head. It seems needless to appeal to mechanical principles in justification of this position. Alter the position, and relations are changed; impediments and obstructions are found in the desired route of return, and reduction becomes difficult or impossible without undue force, and injury to the opposing structures. Restore the position and relation of parts, and the reduction becomes practicable with the exercise of moderate force. The position of the limb at the instant of escape, when not established by direct evidence, can be assumed with tolerable accuracy by the application of the general principles which we have considered above.

I think, therefore, that in reference to position, I may offer the general rule: *That for the easy reduction of a dislocated hip or shoulder, the limb should be placed in, as nearly as possible, the same position as that which most frequently characterizes it at the instant of escape.*

It now remains to consider the principle first named, viz.: *That the reduction of hip and shoulder dislocations can generally be easily effected by putting the limb in such a position as will effectually approximate the two points of attachment of that portion of the ligament which remains untorn.*

But how are we to ascertain which portion remains untorn?

It is obvious that in primary dislocations, *i. e.*, when the dislocated head remains in the locality where it was first thrown, the portion of the ligament on the side toward which the head has been transplanted must be so extensively torn as to permit the escape of the head and its progress to its dislocated position. It is also equally obvious that the opposite portion is not necessarily torn, and when we consider that the position of the limb at the moment of escape is such as to relax this portion of the ligament, we can safely assume its integrity. Take, for example:

THE DORSAL LUXATION OF THE HIP.

The superior and posterior portion of the ligament must be torn, or there could be no dislocation in this direction, while, from the position of the limb at the instant of luxation, the anterior and inferior portion, being relaxed, remains untorn. Now, if we adduct, flex, and inwardly rotate the limb, we approximate the points of attachment of the untorn portion, and thus effectually relax it. If we now apply force in the reverse direction to that which produced the luxation, we shall be able to replace the dislocated head by the exercise of that amount of force which was necessary to cause the accident, minus the amount of force required to rupture the ligaments and tissues which are torn asunder.

The condition of the ligament in this luxation is illustrated in Figs. 1 and 2, Fig. 1 being an anterior, and Fig. 2 a posterior view of the same specimen.

Fig. 1.—Anterior view, showing tense condition of anterior and inferior portion of capsule, and the loose state of the ilio-femoral portion in the dorsal dislocation.

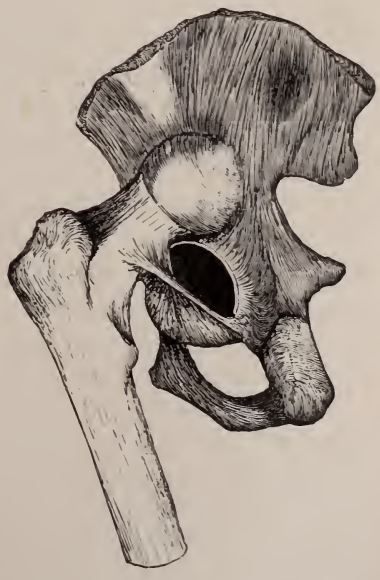

Fig. 2.—Posterior view of same specimen, showing the tense state of the anterior and inferior untorn portion of capsular ligament.

These figures—as is the case in all my illustrations—are made from a dissection of the parts, which dissection I also herewith exhibit. It is seen that the anterior and inferior portion of the ligamentous capsule is untorn, tense, and holds the dislocated head firmly hooked outside the dorsal portion of the rim of the acetabulum, while that portion of the capsule between the anterior inferior spinous process of the ilium and the anterior intertrochanteric line of the femur, which is reinforced and strengthened by the ilio-femoral fibers, is quite loose, owing to the aproximation of these two points, in the shortened, adducted, and internally rotated state of the limb which characterizes this form of dislocation. Thus, this ilio-femoral portion of the capsule, in the dorsal luxation, is entirely without influence, either in determining the deformity or in opposing our efforts at reduction. It is entirely to the anterior and inferior portion of the capsule that these influences are due.

If we now flex, adduct, and inwardly rotate to a still greater degree, we shall loosen the anterior and inferior tense untorn portion which is holding the head hooked outside the acetabular ridge, and then by a moderate amount of force we may draw the head into the socket. This is most conveniently accomplished by putting the patient on the floor on his back; an assistant fixes the pelvis; the surgeon grasps the limb, flexes and adducts it till it crosses the limb of the opposite side at a point as high as the union of the upper with the lower two-thirds of the femur; now rotating the limb inwardly, he will be able to lift the head into place by a moderate effort.

THE BACKWARD DISLOCATION OF THE HIP.

In this variety, whether produced by force operating on the great trochanter rotating the femur forcibly inwards, or by force applied to the lower end of the bone while it is flexed to a right angle with the trunk, it is evident that the posterior portion of the capsular ligament is ruptured, and it is nearly as certain that the anterior portion remains untorn. This anterior unruptured half is drawn tensely across the acetabulum and holds the head hooked behind the posterior portion of the acetabular wall. This is shown in Fig. 3.

Fig. 3.—Showing tense condition of anterior half of capsular ligament in backward dislocation.

Extreme internal rotation, or flexion to a right angle with the trunk and adduction, either, will relax the anterior untorn portion of the ligament, and allow an easy transit of the head over the edge of the acetabulum.

Perhaps the most practical method of applying to this form of dislocation the principles which I have advocated, will be found in placing the patient on the floor on his back, in the same position recommended in the dorsal luxation. An assistant fixes the pelvis while the surgeon flexes the thigh at a right angle with the trunk, and the leg upon the thigh; he then adducts, rotates inwardly, and draws the limb forwards in the direction of extreme adduction, thus lifting the head directly into the socket.

THE THYROID DISLOCATION.

In the dislocation downwards and forwards over the thyroid foramen, the anterior and inferior portion of the capsular ligament must be torn asunder for the escape of the head; while from the extremely abducted state of the limb at the moment of the accident, the superior and posterior portion must be relaxed, and thus escape laceration.

Fig. 4.—Showing the tense, untorn, upward and backward portion of capsular ligament in thyroid dislocation.

Fig. 4 illustrates this luxation and the condition of the ligament. It is seen that while the head of the femur occupies a position over the thyroid foramen, and while the characteristic deformity of direction in the limb is present, viz.: a moderately flexed and slightly abducted position, the superior and posterior untorn portion of the ligament is tense and holds the limb in its state of slight abduction. The flexed position of the limb is due mainly to the necessarily tense condition of the psoas magnus and iliacus muscles.

The characteristic position of the limb in this dislocation is inconsistent with the integrity of the ilio-femoral portion of the capsular ligament. The greatly increased distance between the anterior inferior spinous process of the ilium and the anterior inter-trochanteric line of the femur cannot be accommodated by anything less than the rupture of this portion of the ligament. The head of the femur *can* be placed over the thyroid foramen

in the intact state of this portion of the ligament; but in order to accomplish this, the femur must be flexed to a right angle with the longitude of the trunk. This is illustrated in Fig. 5.

Fig. 5.—Showing what would be the degree of flexion in thyroid dislocation if the ilio-femoral portion of capsule remained untorn.

An examination of this figure, or of the specimen which I herewith exhibit, will fully warrant the positive statement, that in the downward and forward luxation, if the limb is found in the position generally characteristic of this form of the accident, the only untorn part of the capsule will be the upward and backward portion, as is illustrated in figure 4.

To reduce this dislocation, the reducing force should be applied in the usual way to the inner aspect of the upper part of the thigh at its junction with the perinæum, with the intention of lifting the head directly into the socket; but instead of adducting the limb, as is the usual practice, free abduction should be made, thus fulfilling both of the general principles which I have laid down. With these manipulations, there is nothing in the way of an easy return of the head to the socket.

THE FORWARD DISLOCATION.

The forward or pubic dislocation is the most complicated, and consequently the most interesting of the four principal forms of hip luxation. It is probably the result of force applied to the trochanter major in such a manner as to rotate the limb forcibly

outwards, and in this position forcing the head forwards. As the head escapes from the socket and travels forward to its position in front of the body of the pubis, it is certain that the anterior portion of the capsule is ruptured, and it is nearly equally certain that the rupture occurs at the weakest part of this anterior portion. The weakest part will be found at the internal extremity of the ligament at its attachment to the rim of the acetabulum, where it is not reinforced by the ilio-femoral fibers. Through this opening the head escapes and rests in front of the body of the pubis, the posterior surface of the neck resting on the edge of the acetabulum, and the posterior border of the great trochanter settling somewhat into the socket. The portion of the capsule which remains untorn is the whole of the posterior half, and that part of the anterior half covered and strengthened by the reinforcing ilio-femoral fibers. The posterior half is forced down into the acetabulum by the trochanter major, which encroaches upon that cavity. This is shown in Fig. 6, which is an external view of this dislocation:

Fig. 6.—External view of pubic luxation, showing the posterior border of the great trochanter setted into the acetabulum, pressing before it the posterior untorn half of capsule.

Thus pressed into the cavity, this posterior portion of the capsule is moderately tense, but it does exert much influence on this dislocation in any way. On the contrary, the ilio-femoral portion of the capsular ligament in front having continuity of structure with the posterior untorn portion from below the cervix, holds the dislocated head in its luxated position. In this dislocation, the ilio-femoral portion of the capsular ligament, by its continuity with the inferior border of the posterior untorn portion, possesses the potency which Professor Bigelow claims for it in all dislocations. Its position and form, in this luxation, are illustrated in Fig. 7:

Fig. 7.—Anterior view of pubic luxation, showing continuity of tissue between the ilio-femoral and inferior border of posterior half of capsular ligament in pubic dislocation.

It is seen by consulting this illustration, and by examining the preparation from which it is taken, that the influence exerted by this part of the capsular ligament depends largely, if not entirely, upon its continuity with the inferior border of the posterior untorn portion. With this continuity, it has pelvic attachment at each end, while the central portion lies over the cervix and holds it in its dislocated position. To elude the grasp of this untorn portion of the ligament, we have simply to reverse the direction and successive order of the dislocating force. That force pro-

duced, first, extreme external rotation; second, pressure inwards and forwards. Now, to reverse this force, the limb should be drawn backwards and outwards, without altering its general position as regards rotation and direction; then rotate inwards, thus reversing the force both in direction and order.

Practically, the patient should be placed upon the edge of a firm table—a square piano is better on account of its height—with the dislocated limb hanging over the border. An assistant fixes the pelvis while the surgeon, kneeling on the floor, grasps the limb and flexes the leg upon the thigh to obtain more perfect control of the parts. He then draws the limb backwards and outwards, and supplements these efforts by internal rotation, when the head slips into the socket.

DISLOCATIONS OF THE SHOULDER.

Owing to the comparatively small size and shallowness of the glenoid cavity, relatively considered with the head of the humerus, and owing, also, to the looseness of the joint, whereby extreme latitude of motion is provided for, dislocations of the shoulder occur from the operation of comparatively slight violence, and they are reduced with corresponding facility; but the same rôle is played by the capsular ligament here as in the hip-joint, and the same mechanical principles are involved in efforts at reduction.

THE AXILLARY DISLOCATION.

In this dislocation, the inferior portion of the capsule is lacerated, while the superior remains untorn, tense, and—during the first few hours, and sometimes days, until the head works well up into the axillary space—acts as a check-strap upon the humerus, keeping the elbow away from the trunk. This condition of the ligament is shown in Fig. 8, and also in the specimen from which the figure is made, and which I also herewith exhibit. If the humerus be carried up by the side of the head, the untorn portion of the ligament becomes entirely lax, and moderate effort will now draw the head upward into the cavity.

Fig. 8.—Showing untorn upper part of capsule in axillary dislocation of humerus.

For the reduction of this dislocation it is convenient to have the patient sit upon the floor. The arm is then raised to an angle of 45 degrees from the horizontal, and intrusted to an assistant, while the surgeon places his hands on the shoulder with the tips of the fingers in the axilla, resting on the dislocated head. The assistant now makes upward and outward traction, and the head glides into place followed by the surgeon's fingers in the axilla. The arm is then lowered to the pendent position, keeping up the tension till the arm is by the side of the body.

THE FORWARD DISLOCATION.

In the forward, subcoracoid luxation, the anterior portion of the capsule is ruptured, while the posterior untorn portion is stretched across the glenoid cavity and holds the head firmly against the anterior edge, and the elbow in the retracted position characteristic of the accident. Fig. 9 and the specimen from which it was taken illustrate this condition.

To reduce this dislocation an assistant should fix the shoulder while the surgeon raises the arm to a horizontal position, carries it backward, rotates it externally, and draws it into position.

Fig. 9.—Showing untorn posterior half of capsule in sub-coracoid dislocation of humerus.

THE DORSAL DISLOCATION.

In this accident we have the same condition of the parts as in the forward luxation, only reversed in antero-posterior direction.

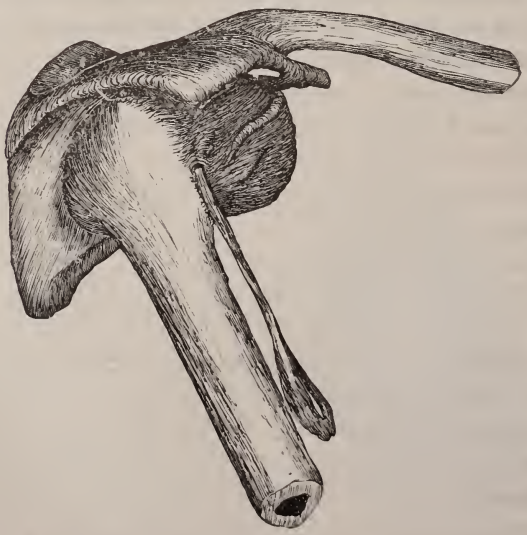

Fig. 10.—Showing untorn posterior half of capsule in dorsal dislocation of humerus.

Fig. 10 and the original specimen which is here exhibited fully demonstrate this lesion. It is seen that the head rests on the dorsum of the scapula, while the vacated glenoid cavity is covered by the anterior untorn half of the capsular ligament, which is stretched across the articular surface, holding the head snugly against the posterior edge of the fossa, and by its inferior fibers causing the advanced position of the lower end of the humerus, which is so characteristic of the accident. Internal rotation relaxes this untorn portion of the ligament, as does also a still more advanced position of the elbow with the humerus elevated to a horizontal position.

For a reduction of this luxation the shoulder should be properly fixed by an assistant, while the surgeon seizes the arm by the elbow and forearm, raises it to a horizontal position, carries it to the front, rotates inwardly and draws it into place.

ANOMALOUS DISLOCATIONS.

When we consider the discrepancy in the size of the humeral head and the glenoid cavity, and observe the amplitude of the capsular ligament which is necessary for the extreme latitude of motion enjoyed by the superior extremity, we notice that the marked fullness of the capsule is gathered up, at its internal extremity, to the size of the rim of the glenoid cavity, thus giving it a somewhat ruffled form. Such a construction, when perhaps it is unusually marked, may permit a splitting of the fibers, giving a button-hole form to the laceration. The escaped head, under such circumstances, would be firmly grasped by the edges of this fissured opening in the capsule, in such a manner as to foil all mere manipulatory efforts. I have three times encountered what I have considered to be this state of the parts. In one case it was my fortune to be able to demonstrate the correctness of these views. It was an old forward dislocation, when, after breaking up the adhesions, I was unable to cause the head to reënter the socket. The uselessness of the arm and the necessity of relief, owing to the dependence of a family on this arm, induced me to cut down upon the dislocated head, when I found the condition above described. I freely divided, with a bistoury, one border of this slit in the capsule, and replaced the head in the glenoid

fossa. This experience was before the era of antiseptic precaution, and although a prolonged suppurative history followed, a final satisfactory recovery was realized.

The other two cases were recent axillary luxations in which no manipulatory effort was sufficient to alter the relation of the displaced head to the socket. Free rotation, backwards and forwards, through nearly all the three hundred and sixty degrees, failed to enlarge the opening sufficiently to permit reduction. Resort was then had to the compound pulley, and extension carried to the ultimate verge of temerity produced signs of laceration of ligamentous structures, but no snap of reduction. Extension was discontinued, and then simple manipulation reduced the luxation at once.

ARTICLE II.

A CASE OF RECOVERY AFTER EXTENSIVE CONTUSION AND LACERATION OF THE PERINÆUM AND URETHRA.

By W. H. WASHBURNE, M.D., Florence, Wis.

J. M., a healthy man aged twenty-five years, a member of the voluntary fire department of Florence, while in the discharge of the duties of a fireman at a fire on the evening of Nov. 26, 1883, entered the second story of the burning building. The floor gave way under him, and he was precipitated to the ground floor, falling astride a floor joist, projecting from which was a splinter of wood.

He walked to his boarding house, a distance of a quarter of a mile, with his clothing wet through and frozen. I saw him immediately, found him suffering from great shock; small, weak pulse; and shivering with the cold.

Upon examination, I found the end of a charred piece of wood projecting from a wound in the right ischio-rectal fossa. This was immediately withdrawn, and the usual means adopted to encourage reaction from the shock.

The splinter measured $5\frac{1}{2}$ inches in length, $1\frac{1}{2}$ inches in width, and 1 inch in thickness at the thickest point. The splinter was driven into the soft parts $3\frac{3}{4}$ inches. The wound was cleansed and dressed with carbolized olive oil (℥i to ℥vi), and morphia administered at intervals during the night.

On the following morning the patient complained that he could not micturate, and the bladder was considerably distended. I attempted to introduce a catheter, but did not succeed, observing, as the instrument was withdrawn, that the eyelet was filled with charcoal and blood. This fact confirmed my fears that the urethra had been wounded.

At 2 o'clock P. M. the patient was anæsthetized, and with the assistance of Drs. C. A. Fortier and R. W. Odell, a thorough exploration of the wound was made. It was ascertained that the splinter had made an opening about two inches long, commencing an inch to the front and right of the anus, and extending backwards and to the right, that it passed obliquely upwards and forwards, tearing away a part of the bulbous and the whole of the membranous portion of the urethra, and passing between the symphysis pubis and the bladder, so that at least two inches of the urethral canal was utterly annihilated.

With a great deal of difficulty the vesical end of the urethra was found, and a No. 8 silver catheter introduced into the bladder and tied there. The patient passed through the catheter a large quantity of urine. No evidence of any infiltration of urine.

Patient passed a comparatively comfortable night, and Nov. 28, 9 A. M., pulse 84, temperature $100\frac{1}{2}^{\circ}$ F. No hypogastric tenderness. Considerable ecchymosis appeared in the vicinity of the external wound. Prescribed quinine and morphia.

On the fourth day after the receipt of the injury his bowels moved, as the result of the administration of saline cathartics.

Previous attempts had been made to move his bowels by means of enemata, but in consequence of the injury to the sphincter ani the fluid was not retained, and no movement followed.

For two days all the urine was voided through the catheter, when it began to escape through the wound.

Dec. 6. Catheter still in the bladder; it moves in and out for a distance of an inch and a half, with changes in the patient's

position, and seems to cause no undue irritation. In view of the extreme difficulty encountered in the introduction of the catheter, it was deemed the lesser of two evils to allow the instrument to remain in position for some days longer, or until it shows some indication of producing serious irritation. At no time up to date has the patient exhibited a temperature above 102½° F., and his pulse has not been above 90.

Dec. 7. This morning at 3 o'clock patient had a slight chill, complained of great uneasiness and thirst, and at the time he was seen at 8.30 A. M. his pulse was 96 and temperature 104½° F. Ordered quinine to be increased to six grains, repeated every three hours, given in capsules. Previous to the occurrence of this chill the patient had taken a seidlitz powder, which had not yet operated. At 6 o'clock in the morning he took one ounce of Rochelle salt, which operated thoroughly at 8 o'clock, and again at 2 p. m. The evening temperature, 8 P. M., was 103⅕° F., pulse 84. Ordered quinine continued in the same doses as ordered in the morning. At 9.30 o'clock in the evening was summoned to the patient, with the intelligence that he was having another chill. On arrival found that his chill had been but slight, but that his temperature had increased; he complained of intense pain in the head; pulse strong and 90 per minute. He complained of some abdominal pain, which he described as lancinating. Prescribed morph. sulph. gr. ⅓ and pot. brom. gr. 20, to be given every three hours. This procured him a good night's sleep, better than he has enjoyed since the receipt of the injury.

Dec. 8, 8.30 A. M., found patient feeling quite comfortable; no pain anywhere. No tenderness of the abdomen. Pulse soft, compressible, and beating 72 per minute, temperature 99⅘°. Advised the continuance of quinine in six grain doses every four hours for to-day; no evidence of cinchonism.

Dec. 9, pulse 60; temperature 98° both morning and evening.

Dec. 10, pulse 60; temperature 98° both morning and evening.

To-day an effort was made to introduce a filiform bougie (made extempore from a piece of whalebone) through the catheter into the bladder, with a view of leaving it there as a guide over

which to introduce a flexible catheter. The effort was unsuccessful, it being impossible to pass the filiform bougie through the eyelet of the catheter.

It was not thought best to remove the instrument to-day. The only irritation which it appears to have created is at the end of the penis, the glans being somewhat reddened, and the prepuce in the region of the frænum being red and tumefied. When the catheter is forced up by changes in the patient's decubitus, it is wiped clean and carefully oiled, with a view to lessening the amount of irritation. The patient is now enjoying a good appetite, indulging in beef steak and potatoes with great relish.

Dec. 12, pulse 60; temperature normal. The tumefaction about the prepuce and irritation of the glans have now almost entirely disappeared. The bowels were again moved to-day by means of saline cathartics. While at stool and straining, the patient passed a considerable quantity of urine through the penis outside the catheter, the water coming through pretty freely.

Dec. 14. Renewed efforts have been made to pass the filiform bougie through the catheter, but without success. The patient complains of considerable pain along the urethra, and any voluntary effort to expel his urine is attended with pain more or less severe. No more urine has come through the urethra. The amount voided by the wound is now constantly decreasing, by far the larger portion escaping through the catheter. The swelling and redness about the glans penis have now entirely disappeared.

Dec. 17. Patient has not passed any urine through the wound since 5 P. M., Dec. 15, the whole amount coming freely through the catheter. There is no evidence of any infiltration of urine among the perineal tissues. The appearance of the wound externally is all that could be desired. The original dressing of carbolized olive oil still maintained. Patient eats and sleeps well, but still complains of pain when he makes voluntary efforts at urination.

Dec. 21. Patient continues to improve daily, the urine all coming through the catheter freely, none through the wound. The patient is now able to urinate at will, the eyelet of the instru-

ment being outside the bladder. To-day, and for the past two days, at least half of his urine has been voided through the urethra outside the catheter. He now complains of no pain on micturition except in the urethra, about an inch back from the meatus, at the point where ten days ago there was so much soreness and tumefaction of the prepuce. His appetite is excellent, and the bowels move every day without the aid of medicine; sleeps well.

Dec. 24. Yesterday removed the catheter, it being the twenty-sixth day since its introduction. It came away very readily, being blackened its entire length. Near the eyelets there was slight roughening of its surface, but not enough to create any serious irritation. The internal surface was heavily coated with calcareous deposit, so that before a great while its channel would have been entirely closed.

Immediately upon the removal of this catheter, an elastic No. 8 was inserted in its place, its introduction being effected with the utmost facility. This catheter was allowed to remain in place until this morning, when it was withdrawn, and the patient allowed to urinate naturally. The urine came in a good-sized stream and with good force, and the patient complained of no pain except near the meatus, where there appears to be an ulceration. It is now deemed best not to keep a catheter continuously in the bladder, but instead thereof to introduce a sound at intervals of six hours, and maintain in position five or ten minutes. The patient was permitted to get out of bed this morning for the first time and stand upon his feet. He affirmed that it gave him no pain anywhere.

Dec. 27. Patient was up and dressed on Christmas day, and has been up every day since, remaining up all day.

The VanBuren sound No. 8 is now used morning and evening, and held in place one hour each time. The urethra is considerably contracted at the meatus, about an inch from the meatus, and at the seat of the injury, so that the introduction of the sound is attended by considerable pain.

Jan. 10, 1884. The patient has been taught to use the sound himself, and has used it twice daily since Jan. 1. He is now attending to his own business, being proprietor of a livery stable, and suffers no inconvenience so far as his work is concerned, as the result of his extensive injury. The external wound is nearly healed, and his physical appearance gives no evidence of the fearful ordeal through which he has passed * * *

Before the catheter was withdrawn from his bladder, the man began having partial erections which were very painful, particularly at those points described as giving evidence of the narrowing of the urethra, the case presenting some of the features of chordee. Since the withdrawal of the catheter, erections have been accompanied with constantly decreasing pain, but they are not perfect. From the general direction of the wound, it is fair to infer that Cowper's glands were injured, if not entirely destroyed, and it is doubtful whether the prostate gland escaped injury. The testicles were not injured, nor were the spermatic cords involved.

April 1, 1884. The patient has continued in perfect health to this date, his erections have grown more and more perfect until the present time, so that his potency is fully established and his recovery complete.

The history of this case is remarkable: 1st, For the rapidity with which so extensive and dangerous an injury was repaired; 2nd, For the length of time the catheter was maintained in position (26 days) without producing any serious irritation; 3rd, That on the sixteenth day after the receipt of his injury, the processes of repair had so far advanced that he passed his urine through the natural channels, and after the nineteenth day no more urine escaped through the wound; 4th, That at no time was there any indication of peritonitis or cystitis; 5th, That with the exception of one day, there was but little constitutional disturbance; 6th, That when the external wound closed, there was no infiltration of urine; 7th, That in forty days he was attending to his usual avocations.

ARTICLE III.

CLINICAL AND PATHOLOGICAL REPORTS OF CASES OF INSANITY.

By S. V. CLEVENGER, M.D., Special Pathologist Cook County Hospital for the Insane.

Female case No. 119. Terminal Dementia. Matilda A., age 30; admitted Aug. 31, 1880; Swede; married. Was suicidal and maniacal with religious delusions. Tried to eat her own shoulder, explaining that as Christ died for her she might as well eat herself for Him. Brother insane; father died of phthisis pulmonalis. Has three children; youngest born just before becoming insane; thus her dementia follows puerperal insanity, but as I have noticed in so many cases with the puerperal condition as an exciting cause, the predisposition was hereditary, as indicated by the brother being insane.

It is well to inquire into the family antecedents of the puerperally insane, for hereditary taint seems to predominate in them.

This case also shows how little importance need attach to religious excitement as a cause of insanity. It was in her case a phase of the mental alienation, as in many others regarded as religious lunatics, Political, religious, or any kind of excitement merely, as a rule, precipitates the insanity, and should not be blamed as a cause in those predisposed.

Phthisis in ancestry of insane may be viewed from many points. Statistics in general, so far, throw but little light upon it, as the prevalence of the disease among the parents of sane persons may show no disproportion. From 329 males and 439 females in this asylum it was ascertained that relatives of insane died from this disease as follows: Fathers of 12 males, 9 females; mothers of 5 males, 9 females; both parents of 2 females; 1 brother of a male. Total fathers 23; mothers 16. Total male insane with phthisis in ancestry 17; total females insane with same 20, so far as ascertained, which was in a very small percentage of cases.

Female case No. 147. Epileptic Insanity. Jane N., age 30; admitted Sept. 29, 1881; English; single. Furor when excited, independently of the epilepsy; the latter is often severe; three or four attacks daily with remissions of two to three weeks, and worse

at menstrual periods. Acts a little sillily after paroxysms of epilepsy, with slight stupor, from which she emerges apparently sane. Mother died in child-bed; father living and well; epilepsy began when 14 years old at menstrual inception; recently convulsions occurred, upon Dec. 28, 1883, Jan. 3, 1884, Feb. 7, Feb. 9, Feb. 13, Feb. 27, March 18.

Female case No. 146. Hypomania. Honora G., age 19; admitted Sept. 20, 1881; domestic; Irish; single. Always happy, with a little of the silliness of hebephrenia, but usually sits at a table with a book (generally one she cannot understand). Fond of dress; coherent, pleasant; was sun-struck June, 1879. Has a cousin here, also insane, female case No. 424.

Male case No. 82. Larvated Epileptic Insanity. Joseph H., age 22; admitted April 30, 1881; cigarmaker; single. Usually quiet and well-behaved; trusted about grounds; cacophorous at times; vociferates and talks vile nonsense; had hæmorrhoids just before insane, anæmic, but otherwise fairly nourished, pupils dilated, pulse 102, heart's action irregular. Younger brother epileptic. Past two years complained of headache and dizziness; has had several seizures, during which consciousness was lost, preceded by excitement, walking, laughing, and whistling. This is a form of epilepsy wherein the usual convulsions are replaced by a psychic equivalent. An important matter to recognize, as the treatment for ordinary epilepsy is indicated in this form of insanity.

Male case No. 120. Mania. Daniel S., age 54; admitted Aug. 3, 1883; negro; teamster. During maniacal access imagines himself wealthy; owns coal mines; hallucinations of sight and hearing; scar on right forehead; stole two dry goods boxes and contents from sidewalk; arrested and committed, but found to be insane. Once saw God in a chariot at his window, who told him to break out. Patient kicked out panels of door, and armed with one, he demolished the contents of his room, keeping up a fire of everything portable until the room was empty. Attendants then rushed upon him, but it required six men a long while to subdue him, owing to prodigious strength. July, 1883, apparently recovering, but Sept. 5, 1883, severe pneumonia began and ended his life Sept. 15, 1883. Autopsy eight hours

after death; aural and temporal muscles large; medulla small in region of olivary bodies; arterial engorgement in isthmus cerebri; also in Rolandic, left region, and in frontal parietal and temporal, but greatest in occipital parts; rusty aspect of dura along superior longitudinal sinus; veins of left side more full than right; stasis right side of cerebellum. Little found besides evidences of former inflammatory lesions, in minor degree, referable to his insanity.

Male case No. 123. Melancholia. F. C. W. A., age 62; admitted Aug. 24, 1882; German; widower; butcher. Senile amnesia for recent events. Large irreducible scrotal hernia; was not intemperate; lost much property and grew despondent; has delusion that he is to be hanged at 10 A. M. of every succeeding day. Says he does not know why he is to be hanged, that he does not deserve it. Visitors are often introduced to him as the State Governor, with a reprieve. He is profuse in his thanks, and for the time lifted from his despondency, but in an hour forgets all about the matter and relapses into the fixed delusion. When argued with, he says that he realizes the insanity of his idea, and that he might be able to overcome it outside the building. Nevertheless, this admission is more of a ruse to obtain his liberty. His hernia renders him quite helpless, and when the tumor is more than ordinarily troublesome, his mental condition is correspondingly worse.

Male case No. 129. Katatonia. Leopold P., age 33; admitted September 7, 1882; German; married; peddler. Cataleptoidal July, 1883; reticent and melancholy following December. No heredity; was sun-struck in July, 1881, confining him to bed awhile, but worked after recovery till summer of 1882. Feels better in cold than in warm weather, which hurts his head. Sun-struck again in summer of 1882. Has had remissions of a few days in each month during which he held short conversations. Melancholia followed first attack, before which he suffered from pain and heated sensation of head January 1, 1884. Emerging from stupor February 8, 1884, attacked attendant with knife which he took from dining room table; is passive now, March, 1884.

Male case No. 136. Chronic Alcoholic Insanity. S. F. S.,

age 55; admitted October 12, 1882; American; married; hotel keeper. Usually elated and garrulous; talks coherently, but is a great bore with his conceitedness; affects piety and quotes Scripture one minute, and swears the next. Father died with phthisis pulm.; mother, in child-bed. Patient is industrious and thorough in his work, but very excitable; pulse rapid and thin; heart tumultuous. February 21, 1884, threatened night watchman; February 27, 1883, furor, noisy, belligerent; tried to break down door of room; when calmer is quite an efficient nurse for sick insane; his main defects being garrulity and occasional explosions of fury.

Male case No. 137. Larvated Epileptic Insanity. Jas. S., age 20; admitted October 16, 1882; American; single; mania recurs about once in three weeks, lasting a day or two. Destructive; suicidal; homicidal; struck patients without provocation several times; quite rational in interim. When insanity began, noticed to hide from his companions, and just before furor grew pale in face, followed by flushing. At his home every article of furniture shows marks of his violence. He claims a relish for blood. February 8, 1884, noisy and belligerent; growing demented.

Male case No. 145. Epileptic Insanity. Edw. H., age 42; American; single; brakeman. Epilepsy ceased December, 1883, and profound dementia set in; hæmatoma auris slight. Died January 3, 1884; no autopsy.

Female case No. 241. Recurrent Melancholia. Julia C., age 42; admitted April 19, 1883; Irish; single. Parents died aged 73 and 82 years. Patient physically healthy. Apathetic, despondent, prays much, refuses to answer questions. Former attacks: 1. Twenty-five years ago; lasted eight months. 2. Sixteen years ago; lasted six months. 3. Two years ago; lasted two months. 4. Began February, 1883; lasted eight months. Menses regular; not painful till last attack, which began with dysmenorrhœa. Discharged Dec. 6, 1883. Friends say her last recovery is the most decided, which is not an unusual circumstance in such cases after the menopause.

Female case No. 234. Melancholia. Catherine B., age 45; admitted April 12, 1883; Bohemian; married. Brother was

here insane; now at home demented; nephew also was here insane. Husband a drunkard; had much domestic trouble; her daughter died and patient was caring for her children, became pyromaniacal. Relatives wrote to Prague and had ancestry traced back three generations and could learn of no insanity among them. They think too much beer had something to do with it, but change of environment appears to be main cause. Ancestry had been well-to-do farmers, living monotonous, quiet lives, and descendants were not accustomed to the rush and bewilderment of such large cities as Chicago. "As soon as anything went wrong they seemed to go insane." The brother had built a house beyond his means, failed and lost his mind.

Male case No. 198. Paretic Dementia. Randall W., age 28; admitted April 12, 1883; American; single. Deaf, partially blind; other members of family deaf; was three years at Newsboys' Home, and two years at Home of Incurables, with locomotor ataxia, and delusions of persecution gradually appeared during residence at latter place.

An interesting feature in this case is the ataxia preceding the paresis, some alienists claiming that paretic dementia is a form of cerebral ataxia allied closely to the locomotor.

Male case No. 199. Paranoia. Thos. K., age 26; admitted May 17, 1883; Irish; single; laborer. Three months insane before admission; parents old and feeble but sane; patient used to hang around churches; had the name of a girl "called" in banns in church without her knowledge; made constant efforts at escape; talks rationally, but argues on subject of religion and is erotic; claims he must marry every female he sees. Gradually improved mentally and grew fat. Discharged apparently recovered March 21, 1884. When a patient improves physically as indicated by acquired fleshiness, and his mentality does not improve at the same time, it augurs ill for the patient, but both body and mind together improving, the chances are more favorable than where mentality returns without restitution of bodily vigor.

Male case No. 204. Paranoia. Terrence M., age 55; admitted April 19, 1883; Irish; single; laborer; was in several wars in English army; tidy; appears intelligent, but refuses

food till forced to eat by hunger. Insanity began with melancholic depression; thought he was to be hanged. Exhibits the interesting form of paranoia known among alienists as *mysophobia* or fear of contamination. His aversion to eating with others arises from the idea that he debases himself by so doing. Refuses to go to bed from similar motives; troublesome and beligerent at times; talks incessantly on religious subjects; says his "spirit and soul were burned up in the stove; that the others in ward are all robbers, and contact with them ruins him. Makes a circuit of ward looking for his soul.

Male case No. 205. Mania from Traumatism. John G., age 45; admitted April 26, 1883; American; married; machinist. Irritable; homicidal; suicidal; destructive; noisy; suspicious; erotic; jealous of wife. Nothing ascertained of ancestry. Was struck by lightning in 1880; suffered mainly pain in head and stomach, but was conscious and talked rationally until the third day, when left hemiplegia supervened, lasting nearly a year. The paralysis was complete, including facial, with ptosis. Tongue and vocal organs first to recover, in 1881, when insanity became evident. Lightning showed marks along forehead, neck, and left side. Has become quieter since admission, tending toward dementia.

Male case No. 215. Syphilitic Insanity. Jas. O., age 21; admitted May 17, 1883; American Celt; single. Erotic and religious delusions. Railroad accident crushed off right leg below knee when 9 years old. Father rheumatic; mother illy-balanced. Mother stated that when patient had leg amputated he inhaled so much chloroform that ten years afterward he became crazy. She "always knew the chloroform would come out of him sometime!" It was not ascertained until December, 1883, that patient had been syphilitic; brother said that patient had been treated by homœopaths in July, 1879, for this trouble; that his hair fell out, but the "disease was cured." As soon as this information was received, he was placed upon antisyphilitic treatment. In February, 1884, periostitis appeared, but is mentally improving.

The necessity for strict truth being communicated to physicians, in such cases especially, is evident from the time lost here.

This patient might have been restored to his family sane long ago had the information been given earlier. This form with psychoses arising from rheumatism are the most curable of all. The question naturally arises, why not institute treatment applicable to such cases (kali iodidum, for instance), in all cases where the ætiology was obscure, in the hope of hitting upon the right cause? This would be unjustifiable in many instances, as great harm could easily supervene from such a method. It would be as little justified as in ordinary practice outside of asylums, even though advocated by one author.

Male case No. 216. Senile Dementia. B. H., age 69; admitted May 8, 1883; American; married; mercantile. Amnesic for recent events; passive; polite; effusive; verbigerative; coherent; dwells much upon his early life. Occasional attacks of transitory furor. Cerebral anæmia, with feeble heart action. Maternal uncle insane at age of 30, when he died after a love disappointment. Patient was always eccentric and tyrannical. Constantly regrets the past; ill-tempered, but remorseful; was arrested for assaulting his landlady when she asked him a simple question. Hair has been gray since age of 28. Always temperate. His peculiarities took a more disagreeable turn in 1881. Has dread of poverty and his family suffering; wishes to seek employment when no occasion for it; family very well circumstanced. July 15, 1883, excited at night—thought he was on a steamboat; wanted it to land and let him off; next day fancied he was dead, and lay quietly in bed all day. Memory weakening. Constantly whines about his being a miserable old creature, though often roused to bursts of fury, during which he is as vituperative as he was before polite. Swears like a pirate at these times, though religious ordinarily. Discriminates in favor of asylum officials, to whom he is always very deferential; unloads his anger upon those he considers of less consequence.

Male case No. 219. Recurrent Melancholia. Wm. L. C., age 50; admitted May 24, 1883; Irish; married; printer. Had been in an asylum before, but was working at his trade when violent bregmatic headache siezed him, with delusions of persecution, and undue desire to shoot a reporter. Gradually recovered and was discharged Feb. 11, 1884.

Male case No. 222. Imbecility. Victor F., age 33; admitted May 29, 1883; Swede; single. Grew worse after great Chicago fire; thought black dog wanted to bite him and witches were after him. Mother is also an imbecile with a venomous tongue and full of phrenological nonsense. Patient spends his entire time prancing up and down ward, slapping his head, as he says, to keep down bad thoughts. Father died of phthisis pulm. Patient is much better off when at work outside, but his mother raises so many objections, and is so offensive with her accusations against the commissioners and asylum officials generally for "kill ing her son with work" that he is kept from doing anything, to pacify her. It would be well if a law compelled asylum patients to work to the extent of their abilities, as uniformly the world over this is found to be of great assistance to the disordered mind. As it is, where objections are raised by ignorant friends, idleness with its evil effects is enforced.

Male case No. 241. Katatonia. Joseph H., age 39; admitted June 28, 1883; Bohemian; married; blacksmith. Delusions of persecution: often 3 days cataleptoidal, followed by melancholia. In asylum is four or five days cataleptoidal. Was here 4 years ago for 7 weeks; then had delusions of persecution and some katatoniac symptoms. Complains of head paining at night; sees the devil; works well during remissions. Has eight children, all of whom are scrofulous (Kiernan noted scrofulous association in this form of insanity while he was in Ward's Island Asylum, New York). Father and two sisters insane; no furor has appeared in his case, as is usual with katatoniacs. In this form of insanity remissions occur which last very long, but unless appropriate treatment is instituted at the outset chronicity follows. The cataleptoidal stage may be instantly broken up by inhalation of amyl nitrite and with advantage to the patient. Atonicity of the bowels accompanies this disorder.

Male case No. 252. Circular Insanity. Henry W., age 24; admitted July 12, 1883; American-German; single; printer; 13 weeks insane before admission. Melancholic delusions of persecution; suspicious; sullen; dreads personal danger; mostly amnesic. Had pneumonia and small-pox and was never very healthy. Mother died of "heart disease." His melancholia

came on suddenly Dec. 28, 1883; severe furor; truly maniacal; not the raptus of melancholia; after breakfast struck theatrical attitudes and gave vent to much stage talk; Jan., 1884, still excited and verbigerative; complete change from former sullenness, which suddenly reappeared Feb. 12, 1884. Theatrical behavior, with the melancholia and mania, cause this case to appear suspiciously like katatonia, but in the absence of the cataleptoidal stages, I have placed him tentatively among circular insane, until the waxy mobility becomes apparent, if it ever does.

Male case No. 259. Stuporous Insanity. Unknown man, age 20; admitted July 16, 1883; American; single; laborer. When admitted, apathetic; unconsciously stuporose; would not speak; walked automatically; nothing disturbed him. Began to improve in December, 1883, and said his name was Johnson, afterwards said it was Sheehan. March, 1884, recovered, but is evidently not overburdened with brains; acts silly, but natural. When asked to go to work, replied: "Catch me working on a county farm."

Male case No. 261. Melancholia. Paul G., age 22; admitted July 26, 1883; German; draughtsman; single. Hypochondriacal; attempted suicide; said he had broken a testicle, and it was running down his leg; jumped into Lake Michigan; was always reticent, and lately drank hard. Recovered rapidly, and was discharged Aug. 10, 1883.

Male case No. 265. Mania. Michael H., age 23; admitted Aug. 2, 1883; American-Celtic; single; gasfitter. Insane five years before admission, following typhoid fever, and gradually growing worse; complete left hemiplegia after fever. Leg recovered activity November, 1863; has had in left eye cataract and orchitis. Homicidal; suicidal; destructive; delusions of persecution; mischievous and treacherous. Mother died of "heart disease."

Male case No. 275. Mania. Andrew V., age 54; admitted Aug. 16, 1883; German; married; expressman. Expansive delusions. "Can kick higher, is stronger and richer than any one else;" tongue coated; pulse rapid; thready. "The world belongs to him;" continuous excitement, with hallucinations of sight and hearing; usually erotic. November, quieter, but de-

lusions persist; improved thereafter rapidly and discharged apparently recovered Dec. 23, 1883. Readmitted April 7, 1884. Had been drinking and was too exhuberent at home.

Male case No. 278. Mania. Lewis A. N., age 26; admitted Aug. 16, 1883; Swede: single; painter; intemperate. Delusions of persecution; imagines people follow him; talks to himself; continually abuses invisible enemies; scar on throat from attempted suicide. Furor Feb. 7 and 12; thought Prussians were after him; would yell: "Hurry up the ammunition wagon!" Feb. 14, stands reflectively in one spot and then spins round three or four times. Feb. 17, excited; lies upon floor and then springs up suddenly as though in battle. Feb. 21, sudden furor; he and another lunatic nearly killed attendant on Ward A1, but prevented through timely rescue by clinical clerk Wm. Cunningham. Patient appeared silly and reeled about ward as though intoxicated in the morning, and dropped dead suddenly March 1, 1884, noon, with face purple from congestion. Autopsy 7 P. M.; scalp thick, fatty and full of blood; leptomeninges bluish discoloration left side apex temporal lobe and in medullary fossa; cerebrum anæmic; extraordinary quantity of cerebro spinal fluid. Numerous small extravasations front of pons and medulla: heart weight, 12½ ounces; no lesions found, though relatives stated he suffered with heart disease; probably angina pectoris.

Male case No. 141. Paretic Dementia. Jas. L., age 41; admitted Oct. 26, 1882; American Celtic; policeman; married; delusions of grandeur and persecution; "Feels first-rate" (the usual assertion in this disease); tremulous speech; was at battle of Ball's Mountain during late war and was shot in sternum, ball lodging in chest; also wounded in back. Father died paralytic, age 65; mother, hæmoptysis, age 58. Mental trouble began in January, 1882, and by January, 1884, memory bad and epileptiform tonic convulsions; Feb. 7, 1884, abed; says he cannot get enough to eat and complains of the taste of his food; Feb. 18, broke window during furor; Feb. 21, says his lungs and other insides are gone and that he only weighs two pounds, and that flour is a million dollars a barrel; thinks everyone in Chicago is starving. These delusions are based upon his general

anæsthesia, which is extreme. Sometimes claims he is dead. Feb. 26 and 28, 1884, furor; March 11, 1884, is having furibund attacks twice weekly. A remission lasted from June 24, 1883, to Aug. 4, 1883, at which time he returned to asylum voluntarily, claiming that Dr. Thuemmler's medicine was the only thing that benefited him. (Occasional secale cornutum.)

Male case No. 263. Epileptic Insanity. Phineas Y., age 44; admitted August 2, 1883; German; single; carpenter. Was at Infirmary four years. After fits, stupid and then maniacal. Stabbed a man in infirmary. Attacks occurred usually monthly or second month, often at night. One of the most dangerous lunatics in the asylum. February 27, 1884, knocked a patient down with a chair. He had a deep depression over vertex from an old wound, through which the brain pulsations could be felt. Was quite an adept at card-playing, and would pass for an ordinarily sane man until approach of epilepsy. No particular motor or sensory disturbance noted aside from his usual convulsions. Spoke connectedly, and no mental faculty seemed to be below the standard usual to a person of his class. General anasarca progressed to his death, March 9, 1884. Autopsy next day. Wound one inch square a little to right of median line, over Rolandic sulcus, though skull closed by proliferation of dura mater. Steatomatous tumor an inch in diameter resting on left orbital plate, obliterating left olfactory nerve completely, extending upward and slightly forward two inches, having destroyed the lenticular nucleus and half of the corpus striatum of that side. Lungs œdematous; right lower lobe congested; left lower lobe slightly congested. Anasarca general. Heart had undergone nearly complete fatty degeneration. Each kidney lobulated (arrested fœtal peculiarity). Pectoralis major muscles divided into strands similar to those found in felidæ.

Male case No. 72. Senile Dementia. John W., age 73; admitted Dec. 12, 1880; English; married. Had been deteriorating mentally ten years. Delusions of persecution; hallucinations of hearing, and unsystematized delusions generally. Health had been fair until after admission. Father died aged; mother of cancer. Had a scientific, inventive turn of mind, but with no practical systematic training in matters of education. Was al-

ways crotchety; often opposed meat, tea, or salt as a diet for family; was always a vegetarian. His family yielded to his whims until they became unbearable. Was formerly very active; now lies abed all day, thinking up wonderful inventions. At the time the telephone appeared, was greatly excited over it. Has six children, all healthy and sane. No heredity. Died Oct. 16, 1883.

It is noticeable that many of the so-called "peculiar," "queer," "crotchety," "irritable" individuals who manage to reach advanced life, fall into senile dementia, through age apparently exaggerating preëxisting defects in their characters.

In this day, when knowledge is so readily attainable, there is certainly a screw loose in the composition of those "perpetual motion" seekers and other illy-balanced speculative minds constantly drifting off into spiritualism, chiromancy, etc., or who, with the advent of age or sickness, are precipitated into easily recognized mental decrepitude.

Female case No. 155. Melancholia. Lotta R., age 40; American; widow; admitted Feb. 16, 1882. Was evidently a well educated and refined lady, sang excellently, and used choice language, but gradually deteriorated mentally. Very little information concerning her past could be obtained. The clothing brought with her indicated previous good circumstances. Toward the last she shrieked piteously at night, and called for "Charlie," day after day would cry to him from the window: "Come and help me; I cannot stand it; the house is falling in. Help me or I shall go crazy!" These were the "raptus" stages of agitated melancholia.

Autopsy twelve hours after death, which occurred August 23, 1883. Conjunctivæ pale. Rigor mortis slight. No pacchionian granulations. Dura thicker than normal; no adhesions; weight of entire brain only 33 ounces. The atrophy was marked, and especially so in the frontal region, where fluid replaced the cerebral tissue which had retracted from the dura. Patient had frequently claimed that the back part of her brain was gone, an indication of aberrant sensations.

It is of prime importance to listen to the delusions of patients as they narrate them; for example, one who complains that he

has no gullet or stomach, indicates thereby the anæsthesia of such parts, and affords a possible clue to the centric seat of disorder, in such a case pneumogastric.

Article IV.

The Hymen. A Part of a Lecture by E. S. McKee, M.D., Adjunct lecturer on Gynæcology, Medical College of Ohio, March 29, 1884.

The hymen (from the Greek word meaning a pellicle) seu membrana virginitatis, called by the Germans Scheidenklappe, Jungfernhäutchen, Jungfernschatz, Jungfernschlœsslein, is a fold of the mucous membrane, situated at the outer orifice of the vagina in the normal condition of the sexual organs of the human female ; also present in the higher order of apes, in the ruminants and carnivora. Its shape is usually semilunar, circular, or parabolic.

Of varieties there are the following in the anatomical museum at Heidelberg :

I. The hymen semilunaris. The normal hymen.

II. The hymen circularis, with small central opening.

III. The hymen cribriformis, sieve-like, containing many holes like a watering pot.

IV. The hymen fibrinatus. Similar to the fringe-like appendages of the ostium abdominale of the tubæ fallopinæ. This form is the most important in a forensic view, as it may be taken for a normal hymen which has been torn.

V. The hymen imperforatus. This on account of the retensio mensium dependent on it, is a cause for surgical treatment. It may also prevent copulation.

Occasionally one finds the opening of the hymen divided into two parts by a perpendicular bridge from the concave border of the hymen to the meatus urinarius where it becomes fast. This sometimes appears as a species of bridle or small cord.

In the crescentic variety the concave border approaches more

or less towards the urethra in such a way as to contract the vagina behind, and then it almost always gives way in coition.

In the circular variety the free border is much thinner than the other, often being fringed, and leaving an opening which is sometimes round and sometimes slightly elongated, and in general situated somewhat nearer the anterior than the posterior wall of the vagina. In some cases there exists an upper anterior and a lower posterior opening with simply a band lying transversely across the vagina. We have also in rare cases a second hymen existing above the first.

The hyman imperforatus which is generally accompanied by a thickening of the membrane is called atresia vaginæ membranacea seu externa. It is proper to differentiate between atresia interna or completa, which depends either on an incomplete development of the vagina from its entire absence or from a diseased condition of the same in consequence of ulcerative processes.

It has been asserted and disputed that the hymen in the negress is not in the same position that it is in the white woman, that is, that it is situated from one-half to two inches up the vagina, instead of over the orifice. Dr. Turnipseed, of South Carolina, claims that the hymen in the negro race is not at the entrance of the vagina, as in the white woman, but as above stated. He reports the examination of eleven cases from 9 to 12 years old, where the hymen is $1\frac{1}{2}$ to 2 inches up. He claimed this to be "one of the anatomical relations Providence has given us to show the non-unity of the races."

Dr. Hyatt, of North Carolina, denies the assertion of Dr. Turnipseed. He has examined 1,000 negresses and has found no marked differences between them and the whites, with the exception of the greater size of the labiæ minoræ of the negress.

Dr. Fort, of Tennessee, reports 6 cases in which he claims to have found the hymen 1 to 2 inches from the vulva. In several cases the hymen was very dense.

Congenital absence of the hymen occurs sometimes as an anomaly. Hyatt reports two such cases. Forensically, this fact is well to know.

Casper says that in children there is often a hymen shaped like a keg or jug, generally 1 to $1\frac{1}{2}$ lines broad. This formation

during childhood often remains, in the cases of idiot girls, throughout life; also a cuff-like hymen is found in this same class. This appears to be more fleshy than membranous.

Sometime there are found on each side lips, numbering four or five, placed like the tiles on a roof. These are endowed with varied powers of resistance. The openings were found to be large enough to admit of a finger. They were found not always to be round or oval, but bridged over with a band or lattice work. He adds another form in which there are numerous lips overlapping each other with a heart-shaped opening In other cases of lip formation he notices what appear to be reduplications of the labiæ minoræ.

These anomalies of the hymen do not have any effect on the other parts of the female genitalia, they remaining perfect in every particular.

As to the hymen in embryo, Scanzoni says: "The hymen, as is known, is completely absent. In the new born child it forms but a minute fold of the mucous membrane, which is insensibly elevated until the age of puberty." This latter fold of the mucous membrane simply marks the place where the hy..en will be when the sexual organs obtain development.

The hymen does not appear, according to Dr. Dolm, until the nineteenth week, not being visible at the sixteenth week. It does not develop on the upper border of the urogenital sinus, but the lowest segment of the urogenital tube. At the middle of the embryonic period, the inner surface of the urogenital tube shows considerable excess of tissue. This shows itself in the curve of the vagina, elongation of the posterior wall, the growth of the papillæ and rugæ. Further on, this hyperplasia extends to the tissue of the external covering, and leads to the formation of an apron-like fold, which gradually grows in breadth. In accordance with its greater proliferation, the posterior vaginal wall plays a prominent part in the formation of this fold.

Von Hoffman, of Wiesbaden, formulated his conclusions of observations on embryos as follows:

I. The hymen should not be considered as a growth springing independently from the wall of the genital tube, but is an accessory product to the formation of the vagina, the lower portion of

which touches the lower or dorsal surface of the allantois, gradually verges into the urogenital sinus, and then forms the floor of the vestibule which is chiefly represented by the hymen.

II. Every hymen, in his opinion, originally possessed a double perforation, and probably the two openings are the former outlets of the Wolffian ducts in the urogenital sinus.

The hymen is attached to the inferior and lateral borders of the orificium vaginæ, and is of a semilunar shape, with its convex border below or posteriorly, and looking toward the perineum, and its concave border above or anteriorly, looking toward the urethra. It is constituted of a mucous fold, containing between its lamellæ a layer of cellular tissue enclosing numerous elastic fibers, and some muscular bundles of organic life. Some blood-vessels ramify in it. The epithelium is laminated, tesselated, and nearly the same thickness as that of the vestibule, 0.3–0.5 m. The delicate but highly vascular and nervous mucous membrane bristles with close set, conical, divided and undivided papillæ, that project into the epithelium, and are 0.2–0.3 m. long.

In an examination of the hymen, to see it plainly, the thighs must be abducted, and the labiæ minoræ must be pulled downward as well as apart, thus pulling the frenulum labiorum out of the way. In moderate abduction, the shape is that of a half moon. If the abduction is increased, this shape is destroyed. Rupture of the hymen occurs, in the vast majority of the cases, on the first approach of the male (defloratio). There are hymens, however, which the male organ is unable to rupture. Intercourse in these cases must remain vulvar, unless there is surgical interference.

Cases are on record where this vulvar intercourse was carried on for years, until the female finally became pregnant and came to term. The accoucheur's attention was called to the existing circumstances either through his inability to make an examination, or when through the inability of the woman to expel her child, the knife was called into use. In other cases, that part of the vaginal entrance not covered with the hymen being large and the hymen probably tough with the male organ small and weak, connection may be completed, and the hymen remain intact. Baudelocque saw two, and Blundell four cases where the patient became

pregnant and arrived at term with the hymen unruptured. A specimen is on exhibition in the museum at Halle, where the mother had given birth to a seven months' fœtus, and the hymen remained perfect.

On the contrary, the rupture of the hymen may occur in various other ways than through sexual intercourse—onanism; a fall with the feet widely separated; riding horseback after the manner of men; ulcerative diseases; flooding; the passage of a tumor from within, or the examining finger from without. Hyrtle reports a case where a young girl was sawing wood. She was thrown upon the saw by a passing wagon, and the handle driven into the vagina, rupturing the hymen. *Apropos*, last summer I was sitting in my front office by the half-open door, reading, when quickly an honest, anxious, unsophisticated seeker after truth, evidently just married, stepped in and was seated beside me before I had time to look up. "Doctor," said he, "can a woman lose her virgin any other way than by being with a man?" I replied: "Yes, she may lose it by flooding, the passage of an instrument, the finger, or violent or sudden exercise." He continued: "Ought a woman, if she is all right, 21 years old, of full size, to complain of pain and it hurting her when a man goes to her the first time?" I replied, "She ought, and in some cases this pain lasts for some time; in one case, I gave chloroform to a newly married woman whose husband had been unable to have satisfactory connection during the two weeks they had been married, every attempt giving the wife the most exquisite pain. The connection was perfected, and when recovering from the chloroform, yet semi-unconscious, she begged him to repeat the act which before she had resisted with terror. I repeated the chloroform in a few days, subsequent to which all went smoothly." The young man said: "I just wanted to know," handed me a fee, bade me good-day, and left as suddenly as he came.

Concerning the function of the hymen, it seems to have been relegated as a *signum anatomicum* of innocence and virginity, as such, however, it has in recent days lost much of its credit. Hyrtle gets off the following "Irishism": Who has it not, can never obtain it. Yet in all times, in all ages, and among all races, civilized and uncivilized, the hymen has been held as a

sign of the virtue and morality of the holder. The old Jews proudly carried the shirt of the newly married about among the relatives and friends, showing the traces of blood. Such a custom is still in vogue in Naples, as the writer found on questioning physicians when there. The Ehrenhemde of the Germans, the camiscci del onore of the Italians, the shirt of honor. The Mohammedans held the flow of blood as a criterion of previous virtue when the flow occurred in *fremis nuptiis.*

The ancient Egyptians cut the hymen through to have it out of the way. Athanasius says that the Phœnicians turned the bride over to a favorite slave to be relieved of her virginity. Under the Emperor Tibernius a law was promulgated that no virgin should be hanged; she must first be relieved of her hymen by the hangman. On the contrary, the renowned courtesan Marion de Lorme, who died in consequence of the getting rid of her seventh fatherless child, was buried with the virgin's crown. The pastor of St. Sulpice, however, after the funeral had the politeness to tear it down and tramp it under foot.

A Roman satyr who wrote of the sexual sins of his age (probably his own) had a little maiden say: "*Junonum meam ratam habeam, si unquam mesmerum me virginem fuissi.*" The hymen being a hindrance to sexual intercourse, the weak-backed and demoralized people of ancient times had the rupture made by the priests or little ivory idols.

Shakespeare has to say in reference to the hymen: "The longer kept the less worth." Among the ancient Greeks the long possession of the hymen meant its possessor to be extremely ugly. They named the old maids furies. The following were the words of the holy Hieronymus: "*Difficiles res virginates idolque rara.*"

In some Asiatic tribes a widow is preferred to a virgin by the would-be husband. *Virgo intacta* has no charms for him. He simply looks at the matter very practically. The widow, he thinks, has no mechanical hindrance to coition, and knows more of wifely and household duties. A man who has a supply of widows as daughters can realize twice as largely on them for their second marriage as he did for their first. One of their number handed his name down to history by being so benevolent as to

give his widowed daughter to his friend for a wife at the same price a virgin would bring.

The following in regard to the hymen, or virginity, is gleaned from the Scriptures:

Speaking of the marriage of the higher priests, Lev. xxi, 13: And he shall take a wife in his virginity.

14. A widow, or a divorced woman, or profane, or an harlot these shall he not take, but he shall take a virgin of his own people to wife.

And further, Deut. xxii. 13: If a man take a wife and go in unto her and hate her.

And give occasion of speech against her and bring up an evil name upon her, and say: I took this woman, and when I came unto her I found her not a maid:

15. Then shall the father of the damsel and her mother take and bring forth the tokens of the damsel's virginity unto the elders of the city in the gates.

16. And the damsel's father shall say unto the elders: I gave my daughter to this man to wife and he hateth her.

17. And lo, he hath given occasion of speech against her, saying, I found not thy daughter a maid:

18. And yet here are the tokens of my daughter's virginity, and they shall spread the cloth before the elders of the city.

19. And the elders of the city shall take that man and chastise him.

20. And they shall amerce him in an hundred shekels of silver, and give them unto the father of the damsel, because he hath brought up an evil name upon a virgin of Israel; and she shall be his wife, he may not put her away all his days.

21. But if this thing be true, and the tokens of virginity be not found for the damsel:

22. Then shall they bring out the damsel to the door of her father's house, and the men of her city shall stone her with stones that she die.

And still further, Deut. xxii, 23: If a damsel that is a virgin be betrothed unto an husband, and a man find her in a city and lie with her:

24. Then ye shall bring them both out unto the gate of that city, and ye shall stone them with stones that they die; the damsel that she cried not, being in the city; and the man because he hath humbled his neighbors wife; so thou shalt put away evil from among you; but if a man find a betrothed damsel in a field, and the man force her and lie with her, then the man only that lay with her shall die.

26. But unto the damsel thou shalt do nothing; there is in the damsel no sin worthy of death; for as when a man riseth against his neighbor and slayeth him, so is this matter.

27. For he found her in the field, and the betrothed damsel cried, and there was none to save her.

28. If a man find a damsel that is a virgin, which is not betrothed, and lay hold on her, and lie with her, and they be found,

29. Then the man that lay with her shall give unto the damsel's father 50 shekels of silver, and she shall be his wife; because he hath humbled her, he may not put her away all his days.

In all times the taking of the hymen unlawfully has been visited with severe punishment. Among the Jews, if the girl was engaged; among the Athenians, Romans, and old French. and English, and in many of the United States in their earlier days, the offense was punishable with death. In New York, by the law of 1787, rape of a child under 10 years of age was punishable with death; in 1810 it was changed to imprisonment for life. Also in Illinois and Massachusetts the punishment formerly was death.

Among the old Welsh, he who robbed a maiden of her hymen, there being two witness to the same, was required to present to his sovereign a piece of silver as high as the sovereign's mouth and as thick as his little finger. In the Isle of Man, in ye olden times, there existed a very wise custom. The criminal was brought into a public place, and the girl whom he had disgraced was given a sword, a whip, and a ring. His punishment lay entirely in her hands—she could either kill, whip, or marry him.

The diagnosis of rupture of the hymen in its medico-legal aspect, whether the rupture be moral or mechanical, or, as the French have it, *virginite ou pucellage*, allows for a great display

of tact on the part of the examining physician. This diagnosis between the moral and mechanical rupture of the hymen is so difficult as to be almost impossible.

Prolapsus of the vagina may make it appear that there is no hymen present. The tendency of modern writers is, I think, to lay too little stress on the presence or absence of the hymen.

There are, of course, many ways in which the hymen may be removed other than moral, but their occurrence is rare. They are very rare. One would think from the opinions expressed by most writers, that they had been exceedingly unfortunate, and had not found a hymen, therefore they concluded that all women were unvirtuous. Like the young man who has spent his substance with harlots, he thinks all women are harlots, or, to cover his own sins, pretends that virtue is unknown except in newly born babes. In some localities, and among some people, this may be true, but among others it is not. The writer remembers distinctly how a clinical teacher in Vienna called a class of practitioners, and with great pride, showed the presence of a hymen in a female 24 years of age.

It was dilated on largely, the teacher evidently believing that his hearers had scarcely, if ever before seen such a membrane, and fearful that they, possibly himself, would never again see the like.

Devergie says: "When not found, in 999 cases out of 1,000, defloration has taken place. He regards the restoration of the hymen as one of the many fables."

Casper seems to know whereof he speaks when he says: "I must declare that when a forensic physician finds a hymen still preserved, even its edges not being torn, and along with it (in young persons) a virgin condition of the breasts and external genitals, he is justified in giving a positive opinion as to the existence of virginity, and *vice versa*."

Fresh rosy lips, bright, beaming eyes, with a free yet modest look, the poetical sign of virginity, has, with scientists, not much credit. Still less has the old Roman sign, the swelling of the neck after matrimony. This made it a part of the marriage ceremony to measure the neck with a thread before and after the

first dissipations. They thought if the bride's neck swelled after marriage, she had not been accustomed to sexual pleasures. Did it not, the inference was that she had.

The remnants of the hymen after it is broken through are drawn into the three little thick, fleshy warts. Immediately after the first coition, they may be seen as irregular bloody lips, and after a week or so contract themselves into the carunculæ myrtiformes (*quod figuram habeant Baccarum myrti*). In general there are but three, one on the back wall of the vagina, the other two, one on either side. They sometimes resemble so much the comb of a cock that they simulate not a little condylomata.

They may become inflamed and hypertrophied, and become a hindrance to parturition and require removal by the knife.

Barnes, Robert—Diseases of Women. London, pp. 59, 64, 176, 105, 181, 189, 190.

Brown, Chas. W.—*Phila. Med. Times*, Nov. 8, 1873; also supplement *Obstetrical Journal of Great Britain and Ireland*, p. 12.

Casper, Johann Ludwig—Handbuch d. Gerichtliche Medezin. Berlin, 1883, vol. i; also translation by Sydenham Society.

Cazeaux, P.—Midwifery, p. 59, 586.

Beck—Medical Jurisprudence, 1823, pp. 73, 74; also Elements of Jurisprudence, London, 1825, p. 65.

Deuteronomy—xxii, 15, 17, 20, 25.

Gray, Henry—Anatomy, 1883, p. 900.

Hart & Barbour—Manual of Gynæcology, 1883, pp.4, 6, 480 483, 488, 489.

Hyrtle—Anatomie, p. 729; also Topographischer Anatomie.

Hoffmann E.—*Vierteljahrcschrift für Gerichtlichen Medizin*, N. F., Bd. 12, S. 229.

Henkes—*Zeitschrift der Staatsartznei*, 1843, ii, 149–44, i, 259, *N. Y. Med Gaz.*, June, 1858, pp. 217, 220.

Heitzman C.—Anatomie, iv, p. 78, 1875.

Judges—xi, 37, 38.

Leviticus—xxi, 13.

Mayer—Neapel und die Neapolitaner, i, Oldenburgh, 1840, S. 319.

Osiander, F. B.—Denkwürdigkeiten, Gottingen, 1875.

Paschlæ—Hymen Columnatus et Vagina Duplex, *Wiener Med. Presse*, 1877, No. i.

Playfair, W. S.—Midwifery, 1880, pp. 43, 44.

Quain—Anatomy, 1882.

Skrziczka—Die Form des Hymen bei Kindern, *Vierteljahreschrift für Gerichtlichen u. Œffentlichen Med.*, ii, 47, 1866.

Stricker, S.—Manual of Histology, new Sydenham Society, 972, vol ii, p. 321.

57 W. 7th Street, Cincinnati.

We call attention to the following circular letter:

Indianapolis, April 10, 1884.

Messrs. Editors:—The next meeting of the Mississippi Valley Medical Association (formerly the Tri-State Medical Society), will be held at Springfield, Illinois, in September, 1884.

Wishing to make the work of the society more interesting and valuable, if possible, than ever, we desire to have papers from the more prominent members of the profession in this portion of our country. We therefore hope you may favor us with a paper. If your time is too much occupied to write a paper, we sincerely hope you will favor us with your presence at the meeting and your counsel in the discussions. As this is not a delegated society, every reputable member of the profession in the Mississippi Valley is eligible to membership by attending the meetings. We hope you will induce your friends to attend and assist in advancing the science of medicine.

Should you be pleased to contribute a paper, you will please communicate the title thereof to Dr. Chas. D. Pearson, Chairman of Committee, 30 East Ohio St., Indianapolis, Ind.

Very truly yours, etc.,

Chas. D. Pearson, m.d., Indianapolis, Ind.,
Wm. A. Byrd, m.d., Quincy, Ill.,
A. M. Owen, m.d., Evansville, Ind.,
Committee on Programme.

Society Reports.

New York Neurological Society.

Stated meeting, March 4, 1884. W. J. Morton, President, in the chair.

First Paper.—Dr. C. L. Dana read a paper upon "Morbid Somnolence," relating a number of histories illustrating different forms of this affection. These forms are classified as follows:

1. Epileptoid sleeping-states.
2. Hysteroid sleeping-states, including (a) spontaneous or "mesmeric" sleep; (b) trance and lethargic states.
3. Morbid somnolence, the expression of a distinct neurosis, (narcolepsy.)
4. Unclassified forms.

The speaker's first case (illustrating class 3) was that of a young man of wealthy family and personal history, who would go to bed at the ordinary hour and could not be roused till noon, or afternoon, or evening of the next day. This would continue for a week or two, when the symptoms would remit.

A second case (illustrating class 3) was that of a young lady who had short attacks of catalepsy, cataleptic *petit-mal*, alternating with sudden attacks of sleep. These came on several times daily. Three other cases, (illustrating class 3) were of neurasthenic persons, who for several months had persistent drowsiness, not attributable to any nutritive or organic disorder.

Dr. Dana also reported a case furnished by Dr. L. Putzel, illustrating the epileptoid sleeping states.

Discussion on Dr. Dana's Paper.

Dr. Wm. M. Leszynsky—"I know of two cases which might be termed a mild form of morbid somnolence, where the patient

would fall asleep at almost any hour of the day while reading or conversing, the sleep lasting at times for an hour or more.

The cause of this somnolence seemed to me to be undoubtedly due to faulty assimilation of food, and was cured by the use of nitro-muriatic acid, etc.

Dr. Weber—I have seen but a few cases. In diabetes, morbid somnolence is believed to be a prominent symptom. I have seen twenty or thirty of such cases, well pronounced, but have not seen one case where morbid somnolence prevailed; on the contrary, the patients did not sleep as much as normal.

I remember two cases of locomotor ataxia, in which there was a great tendency to prolonged sleep. In one of these cases the man would sleep often fifteen hours at a time.

I have observed sopor in chronic endarteritis in a number of cases, especially in cases where the condition of cerebral arteries tends to apoplexy. There was one man who would fall asleep during dinner, be taken up to bed, and there sleep till the next day.

Drs. Roberts and C. E. Nelson made remarks, giving cases, as to making up sleep-time after prolonged vigil. Dr. Roberts remarked that sopor was met with in his case of myxœdema, read previously before this society, and published. In such cases sopor is recognized as a symptom of disease.

Dr. Shaw, of Brooklyn, related a case of a man who would fall asleep in the clinic.

Dr. R. B. Prescott said: I have one case bearing on this subject, Mr. President, which came into mind while Dr. Dana was reading his paper, and which, as it may not be altogether without interest, I will relate. It is that of a farmer, unmarried, forty years of age or more, living in a small village in Massachusetts, who, some ten years ago, began, without any apparent cause, to be troubled with excessive drowsiness. It manifested itself first in a disposition to sleep unseasonably long in the morning. He would remain in bed until long after the breakfast hour, and complain at intervals during the day of still feeling sleepy. Gradually he came to neglect the work of his farm,

This paper will appear in full in the April number of the *Journal of Nervous and Mental Disease*.

and remained about the house, dozing away a considerable portion of the time. His social nature, too, underwent a decided change. He became reserved and silent. He shunned all intercourse with friends and acquaintances, was with difficulty made even to answer ordinary questions, and was easily moved to tears. On one occasion, I was told, that he fell asleep on his wagon while taking a load of produce to the nearest market town, and slept soundly for many hours, his horse having of his own will taken an unfrequented road, and finally stopped at the place where he was discovered, the driver still fast asleep.

His condition at present is that of a gradually deepening mental lethargy. He passes a large portion of his time in bed, and takes little interest in what takes place around him, though at times he partially arouses, and will read the newspapers or carry on a brief conversation, mainly in monosyllabic replies to questions. His bodily functions are all normal, and there is no evidence of any physical disease. His general health was good up to the time of the appearance of this morbid somnolency, and he is not the subject of any hereditary taint, so far as known. He is now regarded by those who know him as mildly insane, and his recovery is not expected.

The President said: I have seen and treated but one of these very peculiar cases which I should be willing, following Dr. Dana's lines of diagnosis, to classify as true morbid somnolence. Of course, those who sleep after prolonged forced wakefulness do not fall within the author's categories.

As an instance of simple sleep of this nature, I well remember of sleeping twenty-four hours, without a moment of recollected consciousness, after two days and two nights in the saddle during a time of great danger. This may be said to be simply normal somnolence. The case of morbid somnolence I refer to, was that of a physician in this city, who had suffered from this condition for fifteen years. He was habitually overcome by an uncontrollable desire to sleep during the day time, no matter how malapropos the time or place; this desire he would fight against with all his power of control, but would finally yield to sopor. Even in the dentist's chair, while a sensitive tooth was being "scraped," he had fallen asleep. Often, in the rounds of daily practice, he

would feel this lethargy creeping over him at critical moments, as for instance when his services were most needed at a confinement, and would be forced to yield to it and sleep. It was impossible, for the same reason, for him to read or study. In fact, life was becoming to him a soporific blank.

Other symptoms were forgetfulness, frontal and occipital headache, a general malaise, great sense of weariness, palpitation of the heart on active exercise, and prostatic irritation. He had been examined time and time again by friends of eminence in the medical profession for organic disease, and none existed. The urine, especially, had been the subject of careful tests. I repeated these examinations, with no better results. Malaria was out of the question. I treated this patient on the basis of a profound anæmia—gave him large and increasing doses of iron (Bland's pills), until he was taking 30 grains three times daily; gave him, additionally, glonoin. Under this treatment he improved wonderfully, and at his last visit, several months ago, he reported that he seldom fell asleep during the day.

Dr. Dana, in closing the discussion, reported a case similar to that of the English farmer; this case would have periods of remission for several years. These cases are supposed to end in insanity. There is persistent drowsiness in diabetes and in syphilis, also previous to attacks of epilepsy. There is recognized a "sleeping sickness" in Africa; the French authority, Ballet, mentions these conditions.

Second paper—Treatment of Wry Neck by Sulphate of Atropia, by W. M. Leszynsky, M.D.

The reader related the history of the case of a young woman, whose occupation being that of a book-folder, she was obliged to turn her head very frequently toward the left side. The right sterno-cluilo-mastoid and trapezius muscles became affected with a very severe form of clonic spasm, which almost exhausted the strength of the patient. The treatment adopted was the daily injection of sulphate of atropia into the contracting muscles, beginning with gr. 1.80, and gradually increasing to gr. 1.6, which maximum dose was continued four days, when recovery supervened.

In addition to the atropia, galvanism was used, and the faradic current was applied to the opposite side.

DISCUSSION.

Dr. J. C. Shaw—I have been called three times in consultation in these cases where atropine was used. There was a great deal of pain, and marked neuropathic tendency; insanity in the family, in one case. There is one difficulty in the treatment by atropine, that it sometimes causes disagreeable symptoms, especially in delicate women. In one case, where the drug was pushed, it caused such distress that the patient, a woman, refused to take it longer. Atropine in large doses cannot be used in all cases, therefore.

Dr. C. L. Dana said that Dr. Leszynsky was entitled to great credit, in employing atropia against such physiological odds. He believed that the cure was due to the employment of atropia. One point must be borne in mind, and that is that we must select our cases; in those cases where the disease is plainly neurosis, atropia may answer. In many cases, however, the disease appears to be of a peripheral and rheumatic character. Here antirheumatic remedies answer better.

Dr. Gibney—In view of the fact that Dr. Leszynsky administered electricity and other agents, as his report shows, some doubt might be expressed as to the curative effects of the atropine injections. The relationship of cause and effect does not seem sharply enough defined. I have had no personal experience with this drug in torticollis. A few years ago, in a case of rotary spasm of the head, I had very prompt and excellent results in the use of the fluid extract of gelseminum carried to tonic doses. Dr. Leszynsky certainly deserves credit for the heroic dosage of atropine in this case.

Dr. Birdsall related the history of a case of torticollis treated at the Manhattan Hospital by his assistant, Dr. Terriberry, in a child about 8 years of age, by the application of as strong a galvanic current as could be endured for from twenty to thirty minutes on the affected muscles, three times a week for several weeks, with gradual improvement, which finally terminated in complete recovery. Ticture of belladonna was administered in drop doses,

until slight physiological effects were produced. Dr. Birdsall was inclined to credit the curative effect in this case mainly to the galvanism, though he thought that a combination of the method with atropia and that of galvanism would, in general, be far more serviceable than either alone.

Dr. Weber—Was a traumatic effect produced by the hypodermic injections?

Dr. Leszynsky—The injections were made into the substance of the muscle, and no traumatic effect was produced. The preparation of atropia used was Merck's, and the solution was freshly prepared every two or three days.

Remarks of Dr. David Webster:

Mr. President:—I have listened to Dr. Leszynsky's paper with much interest. Although I have seen but few cases of wry neck, I have had a good deal of experience with atropine, and I beg leave to question whether the same results might not have been accomplished by smaller doses applied locally. For the purpose of relaxing the sphincter pupillæ and the ciliary muscle we never give atropia by the mouth or hypodermically, but always apply it locally to the surface of the eyeball. Less than 1-20000 of a grain applied to the conjunctiva will paralyze the muscles I have named, while it would require a many times larger dose to produce the same effect, if given hypodermically.

It is remarkable that Dr. Leszynsky's patient tolerated so large a dose as one-sixth of a grain. There is a wide difference in the quantity required to produce the physiological effects of the drug in different persons. I have frequently seen a drop of a four-grain solution, applied to the eye, produce the peculiar scarlet flushing of the face, especially in infants. I also know of a case in which a single drop in the eye caused marked delirium in a young lady, so that she had to be taken home in a carriage. I have had some personal experience with the physiological effects of atropia. I once swallowed what I supposed to be ten drops of Magendie's solution of morphia, to check a diarrhœa, while I went to Brooklyn to assist in an enucleation. On the way I noticed that I felt very strangely, going off into curious dreams, entering into imaginary conversations, etc. When I got to the place of operation, I found on attempting to talk that I

could scarcely speak above a whisper, my mouth and throat were so dry. Dr. Agnew noticed that my face was flushed and my pupils dilated. I went home and went to bed, and slept soundly until the next morning. As soon as I awoke, it dawned upon me that I must have taken atropine instead of morphine. As soon as I saw Dr. Agnew, he told me he had arrived at the same conclusion. I found the atropine and morphine bottles side by side on my table. The mystery was explained.

I once saw a case in the practice of a brother practitioner, where one-sixteenth of a grain of sulphate of atropia, given with half a grain of morphia subcutaneously, produced delirium, lasting for half a day or more. This was in a hysterical lady who was used to hypodermics of morphia without atropia.

Dr. Leszynsky's method of giving the drug was a perfectly safe one, however, as he cautiously felt his way, from smaller to larger doses.

Dr. G. W. Jacoby said: It was not my intention to make any remarks upon this subject, as the objection which I intended to raise to the indiscriminate employment of galvanism and atropine in the treatment of Dr. L's case, has already been made by some of the preceding speakers; but Dr. Gibney's remarks in reference to the facility of producing the physiological effects of atropine, in some cases, by very minute doses, recall to my mind very vividly a case in which this was also very noticeable. The patient, a girl, aged 12 years, came to me affected with a left-sided tonic torticollis, probably of rheumatic origin. My results with electricity upon other cases having been unsatisfactory, I determined to treat this case by the hypodermic injection of sulphate of atropia. I therefore injected one-fiftieth of a grain of the drug.

This one injection produced all the symptoms of atropine-poisoning, ending in a violent delirium which lasted for ten hours.

When the patient had recovered from the effects of the atropine, I naturally felt reluctant to continue its use, and began treatment of the torticollis by galvanism. After two weeks the child was discharged from treatment entirely recovered.

The points that I wish to mark, are first, the small amount of atropine necessary in this case to produce delirium, and sec-

ondly, the fact of a cure by self-limitation, or possibly through the action of the galvanic current. Had no ill effects resulted from the use of the atropia, I would probably have continued its use, and my patient recovering, it would have been only natural to attribute this recovery to the use of the atropine.

Therefore, we cannot be too cautious in drawing conclusions from a single case, no matter how well observed, and we should be very careful not to use two potent remedies, such as galvanism and atropine, simultaneously, as our scepticism in regard to the efficiency of either one will not be considered scientific proof of the beneficial action of the other.

Dr. Leszynsky, in closing the discussion, said:

As Dr. Dana saw the patient referred to in my paper, I am pleased to hear that he agrees with me in stating that recovery was due to the employment of the atropia.

In reporting the history of this case, I expected that the question would arise as to which of the remedies employed had effected the cure, therefore I was not surprised to hear the criticism of Drs. Gibney and Jacoby, and in reply I will state that the number of cells used in applying the galvanic current was from ten to twenty of a Stohrer portable battery. The patient could not tolerate a stronger application, and this was continued for nearly fifteen minutes daily. After the removal of the electrodes, I found that the spasm invariably became more vigorous than ever, and I always allowed about ten minutes to elapse before injecting the atropia.

I would again direct the attention of the society to the fact that, notwithstanding the daily application of galvanism in conjunction with the use of atropia, *no improvement was shown until the twentieth day, soon after a rapid increase of the atropia from gr. one-twentieth to nearly gr. one-eighth.* Then the improvement became so evident that it can hardly be doubted that the atropia was the important element which effected the successful result. In regard to the use of the bromide of sodium, I can safely say that bromism was not produced. The faucial reflex was frequently tested, and remained well marked throughout the entire course of treatment.

Dr. Webster's suggestion may be a very good one if we accept

it from an ophthalmological standpoint, but in this class of cases I cannot see what advantage could be gained by the inunction of the oleate of atropia.

The object in using this sulphate of atropia was to produce paralysis of the trunk and branches of the spinal accessory nerve, therefore it was injected into the substance of the muscle for the purpose of producing its *local effects* on the motor nerve, although eminent authorities like Ringer and Traser have concluded, after an elaborate series of experiments upon living animals, that atropia paralyzes the motor nerves through its action upon the spinal cord, and not by its action through the circulation. I believe that the oleate, if applied locally, would produce more rapid constitutional symptoms on account of its speedy absorption, and another objection is that the dose cannot be so accurately determined.

In conclusion, I will state that the patient remains well, and that no sign nor symptom of spasm has since been shown.

Nomination of officers for ensuing year: President, Birdsall, Gray, Morton, W. A. Hammond; First Vice-President, C. L. Dana; Second Vice-President, G. W. Jacoby; Recording Secretary, E. C. Wendt; Corresponding Secretary, W. M. Leszynsky; Treasurer, E. C. Harwood; Councillors, (five) Weber, Seguin, Jacoby, Morton, W. A. Hammond, McBride.

The society then adjourned.

CHICAGO SOCIETY OF OPHTHALMOLOGY AND OTOLOGY.

The society met February 14, 1884. After transacting the usual routine of business, the following paper was read by Dr. E. L. Holmes: The Prognosis of Choroidal Sarcoma and Life Insurance.

"On December 3, 1874, I extirpated the right eye of Mr. ———, 47 years of age, who came to me with the following symptoms: The pupil was closed; the cornea slightly vascular; the vessels tortuous. The tension of the globe was greatly

increased. The eye had been blind 12 years; had suffered from periodic pain two years, and from constant and severe pain eight months.

I expressed the opinion that the affection was glaucoma, following iritis or choroidal tumor. The case reported in Knapp's Archives, Vol. VI, proved to be a glio-sarcoma of the choroid, with small, round cells.

Within a few days I have been requested by a life insurance company to express an opinion regarding the nature of this tumor, as the patient had applied for a policy.

The prognosis in cases of choroidal sarcoma has been of great imterest to me, since my individual experience has been at variance with the opinions generally expressed on the subject.

I have been taught to believe that the average duration of life after the removal of the globe is only four years. In this case more than nine years have elapsed, with no symptoms of local nor of remote recurrence. I occasionally meet a gentleman in most excellent health, one of whose eyes I extirpated with melanotic sarcoma 14 years ago. I have enucleated the globe 26 times for this form of tumor, and have always urged the patient to inform me of any evidence of future local manifestations, or of any impairment of the general health.

In only one case have I ever received a favorable or unfavorable report. In this case there was a speedy return of melanotic growths in the orbit, in the liver, and different portions of the integument.

On the other hand, I have received subsequent reports in nearly all cases of glioma, for which I have removed the globe 24 times, and in which the glioma reappeared in the orbit within a few months.

My own experience would not lead me to regard sarcoma of the choroid as a very malignant disease. Under all the circumstances, I am surprised that I have been able to obtain the subsequent history of so few of my patients, the more so in view of my experience with glioma. The difference of opinion expressed by authors as to the ratio of fatality arises, I suspect, from the difficulty in following the subsequent history.

In reference to life insurance, I can only say I believe the application of a patient who has been affected by sarcoma of the choroid, could not be favorably entertained by the medical examiner."

Dr. Bœrne Bettman mentioned two cases of enucleation of one eye for sarcoma and glioma. In neither of these individuals had a return of the disease been noticed. Fully six years have elapsed since the sarcoma was removed, and three years since the extirpation of the retinal growth. Dr. W. Montgomery related an instance of reappearance of the tumor and death of the patient a year after enucleation of the eye. The sarcoma was in an advanced stage, and had broken through the globe.

Dr. S. Bishop then addressed the society on Acute Suppurative Inflammation of the Middle Ear—its causes and Treatment. The causes of this disease may be arranged under the three following heads: I. Natural causes. II. Traumatic causes. III. Predisposing causes. Under the first category, cold winds and drafts occupy a prominent position. Sudden and extreme changes in the temperature and humidity of the air are prolific causes of this disease. Water is a source of great evil, swimmers and sailors are frequent subjects to inflammatory attacks of the ears. The water may enter the middle ear through the Eustachian tube, form a douche, and set up a violent inflammation.

II. The second class of causes includes fracture of the temporal bone, contusions of the cranium, and sudden forcible condensation of air in the external auditory canal from any cause, such as explosions of fire-arms, and falls upon the ear. The harmful practice indulged in by parents and teachers of boxing and cuffing the ears is to be condemned. Several cases were cited of destructive inflammation and loss of hearing, caused by this obnoxious treatment. Picking and cleansing of the ears with pins, toothpicks, introduction of pebbles, beans and insects, frequently give rise to much trouble.

III. The predisposing causes are the most numerous. All those diseases, conditions, and practices which debilitate. Whatever causes congestion of the middle ear predisposes to an inflammation, such as quinine, excessive use of alcoholic beverages,

strong coffee, tea, and much tobacco smoking, diphtheria, scarlet fever, and naso-pharyngeal catarrh.

During the first stage of the disease the treatment should be palliative, constant application of cold, local depletion. Three or four leeches placed in front of the tragus will afford speedy relief. The hypodermic injection of morphine is preferable to instillation of Magendie's solution in the ear. The solution cools rapidly, and the change of temperature is apt to increase the inflammation. Tobacco smoke blown into the external ear, through a pallet of cotton, is a very efficient remedy.

General refrigerant remedies must be employed; laxatives, sudorifics, diuretics, should be prescribed on general principles; nutritous but non-stimulating remedies should be enjoined. A simple method to evacuate the middle ear is the following one. It is the reverse of the Valsalvian method of inflation. The patient is instructed to incline the head forwards, compress both nostrils with the thumb and finger, and close the mouth. Then he is directed to draw in the breath, as it were, thus producing by the inspiration a partial vacuum in the nasal cavities and pharynx. Immediately the fluid secretions in the tympanum are forced into the throat and expectorated. If there is a great swelling of the walls of the Eustachian tube, the method may not at first succeed, but is easily practiced when the tumefaction is reduced. Patients should be directed to swallow after trying this experiment, the air reënters the middle ear, and equilibrium of pressure is restored. Catheterization is recommended when this method fails. When rupture of the M. T. is inevitable, paracentesis is resorted to. During the second stage cleanliness should be strictly observed. When pain has ceased, the dry method of treatment with pulverized boracic acid or iodoform is introduced.

The carbolic acid treatment has not been satisfactory in the doctor's hands. A five per cent. solution is necessary to destroy bacteria. He is fearful that a solution of this strength might cause suppuration. One part of bromine to 1,500 parts of water, and one part of corrosive sublimate to 20,500 of water, will destroy the bacteria in 10 minutes. When the trouble shows a tendency to become chronic, the following formula is prescribed:

℞ Iodoform.....ʒi
Zinc sulph.....gr. ii
Aq. dist.....ℨi
M.

Dr. Gradle opened the discussion by stating that micro-organisms are one of the causes of suppuration of the middle ear. Experiments have proven that progressive suppuration is always due to micro-organisms. As long as the discharge is profuse, bacteria are always present. They diminish and no longer increase in the discharge as the inflammation subsides. Such micrococci have been found in abscesses, and are of considerable significance. His experience in the treatment of this disease has been limited entirely to the antiseptic method. He no longer uses boracic acid, having found a more efficient substitute in the sublimate and bismuth. It checks suppuration more rapidly, and destroys the factor after the first application. A five per cent. solution of carbolic acid will not, according to the doctor's opinion, produce suppuration.

Dr. Starkey has seen good results follow the use of peroxide of hydrogen.

Dr. Holmes disapproved of paracentesis of the M. T. in acute suppuration of the middle ear. He thought the trouble would only be aggravated by such interference.

Dr. Montgomery stated that Politzer has abandoned operative treatment in acute suppuration, but practices the method in catarrhal inflammation where there is a serous secretion.

Dr. Hotz expressed doubt as to the possibility of performing the negative Valsalvian method in this disease, during the stage of inflammation, owing to the swollen condition of the mucous membrane lining the Eustachian tube. He could not satisfy himself that leeches put on the mastoid process were not as efficacious as when placed on the tragus. They relieve the pain, and should be prescribed in every case. He is fully satisfied with the action of boracic acid, and does not approve of bismuth. This powder does not dissolve, and by accumulating in the ear, might act as an irritant.

An interesting case of foreign body embedded in the fundus oculi was then shown by Dr. Hotz.

The patient was injured six months ago; a piece of steel punch penetrated the eye after passing through the upper lid. Some time afterwards he noticed a dimness of vision, followed by almost complete loss of sight. Externally, no scar or sign of inflammation is visible; the pupil is somewhat dilated; the vitreous in the upper anterior part shows some cobweb-like opacities. In the upper and inner part of the fundus, close to the papilla, is seen a black, slender, and round body, apparently about one-fourth inch ong. One end is fastened in the tissues of the eye, the other end of the splinter projects into the vitreous, reaching close up to the lens. The piece of steel is firmly fixed; it does not change its position during movements of the eye. The papilla, in fact entire fundus, is blurred, owing to the neuro-retinitis.

BOERNE BETTMAN, M.D.,
Secretary.

CHICAGO MEDICAL SOCIETY.

At the regular semi-monthly meeting of March 3, 1884, the large attendance was noted, and the session was unusually interesting. Two important topics were discussed, the first being a rhetorical treatise prepared by Dr. Charles E. Webster, on "Pott's Disease as Illustrating the Principles of Early Diagnosis," containing so much original study that instead of appending a synopsis in these proceedings, the readers of the JOURNAL were favored with the paper in its original form in the April number.

In the discussion which followed a number participated, among whom were Dr. Wm. E. Clarke, who expressed gratification at hearing the paper, and thought the many learned points therein contained should be of much value to the profession generally.

Dr. D. W. Graham had considerable experience in treating this class of troubles. The greater number of his cases had come to him through the dispensary, and were charity patients.

April 10. The opacities in the vitreous have entirely disappeared, the fundus is much clearer and vision has decidedly improved.

The speaker thought too much importance could not be attached to early diagnosis in these unfortunate cases, and it should be regarded as a crime for parents to neglect their children at an early stage, or fail to have them treated. The table prepared by the author is admirably gotten up.

Dr. Robert Tilley desired to add his testimony to the value of thepaper,trusting that we should be fully conscientious, especially in this class of cases, to make an early diagnosis. He thought, however, that parents of charity patients did not pay proper heed to advice regarding the welfare of their children.

Two additional members who spoke were at present treating cases of caries in upper dorsal and other regions, that possibly would require the greatest skill in deciding positively whether the disease would invade tissues adjacent,or be retarded,and deformity prevented.

Dr. Webster thought possibly, in conclusion, that muscular rheumatism may be mistaken for Pott's disease, rather than all of those in the table.

This was succeeded by a paper read by Dr. Oscar J. Price, who gave a report of a case of aneurismal tumor from the arch of the aorta, with the causes, varieties, difficulty in diagnosis, treatment, history, and pathology of his case, of which the following main points cited in the paper, with the discussion, are given:

G. R., age 40; weight 140; temperament, gouty or sanguine; married; stone contracter; was first visited by the writer on the morning of February 4 last. The patient had just returned from a Southern trip of some three weeks' duration, having arrived home about two hours previously. Found him sitting up and dressed, quite free from excitement, and apparently in no way entertaining serious apprehension as to his condition or welfare. He had complained more or less during the past year, and there had been constantly a dull aching pain in the muscles of the right arm, which gradually extended to the upper portion of the right chest and centered there. It had become lately quite acute and hard to bear. He also had some cough and dyspnœa; was conscious of an unusually rapid action of the heart,which particularly attracted his attention upon any exertion or excitement. He stated that his trouble had been considered by his former medical

attendant as muscular rheumatism, for which was pursued constant treatment covering many months. Finally he was advised to make a southern trip with hopes of recovering his health. Could not say whether this advice had been given with the belief that there existed a tendency to phthisis. No benefit having accrued from the change of climate as he was conscious of feeling worse, and became more easily exhausted upon the slightest endeavor, he resolved to return home much sooner than he at first contemplated, and while in a sleeping car was suddenly taken with a hæmorrhage from the lungs which was very profuse and exhausting. Receiving some temporary medical attendance at the time he soon rallied from the shock and was enabled to pursue his journey home. In response to inquiries he stated he had generally considered himself rugged and healthy, had led a fairly temperate life. Some twelve years ago, however, he had an attack of acute inflammatory rheumatism, and had also in earlier years contracted syphilis.

A careful and exact examination of his chest was fraught with considerable difficulty, owing to the fact of his having just emerged from a severe attack of hæmorrhage, and the consequent danger of exciting another. Much percussing of the chest not appearing to be warrantable under the circumstances, I was content with as gentle an examination as possible. There was a complete suppression of pectoral or vocal fremitus, and, indeed, a total absence of all sounds over the right thorax as elicited by auscultation. Very gentle and limited percussion appeared to reveal the existence of a cavity of presumably large proportions. In the upper portion of the lung were evidences of bronchopneumonia, while the heart was found to be crowded considerably to the left; its valves working normally, but much accelerated in action. Instructions were given for the patient to immediately take to his bed, to remain perfectly quiet, and to be given cold drinks and food with a view to avoiding, in so far as possible, other hæmorrhages presumably imminent. In furtherance of this he was placed upon a mixture containing digitalis, ergot, sulphuric acid, and opium, in proper doses, with a view of controlling the excitability and force of the heart's action, allaying pain, and perhaps influencing favorably the expected

hemorrhage. The next morning was called early, and found patient had just had another hæmorrhage of about one pint, and was in a state of the greatest prostration, bathed in cold, clammy perspiration, and suffering acute pain, extending from about the second right intercostal space, near the sternum, through to the back. One gr. of ext. ergotine was immediately injected into his back, and $\frac{1}{4}$ gr. morphia sulph. in his arm. Stimulants were exhibited, and in the course of two hours his condition had materially improved, circulation and warmth being again restored, he resting quite easily. * * * * The following day Dr. J. P. Ross saw the case in consultation, and then a very careful and extensive examination was made. It was his opinion there was an effusion in the right chest, and acting upon this belief, an aspirating needle was thrust through an intercostal space twice at different points, but without return of fluid other than a little blood. No resistance was met by the needle, which after introduction was tipped in different directions without obstruction, thus irresistibly suggesting the conclusion of the existence of a ruptured, leaking aneurism.

Remedies to control the excitability of the heart' action, to allay pain, conjoined with perfect quietude, were all that was now attempted. The following night he had another severe hæmorrhage, from which he only partially rallied, to be plunged into yet another the succeeding day, from which he gradually sank, dying on the evening of the next, a little over a week from the first hemorrhage.

Autopsy eighteen hours after death kindly permitted by friends. Besides the author, there were present Drs. J. P. Ross, J. A. Robison, and E. P. Murdock; Rigor mortis well established; subject fairly nourished; skin white. Incision from upper part of sternum to ensiform cartilage, thence along course of costal cartilages. Incision into right pleural cavity caused a small amount of sero-sanguineous fluid to flow out; heart revealed crowded to the left, and large blood clots in right pleural cavity; blood removed to the amount of over two quarts. There now appeared a large sacculated aneurism of the first portion of the arch of the aorta, enclosing a large fibrinous mass some four inches in diameter. Pericardium adherent to heart; sac of

aneurism adherent to right pleura; post-mortem clot in right auricle; aneurism ruptured, opening into the pleural cavity at the lower portion of upper lobe of right lung in front, also an opening into the upper portion of the right upper lobe communicating with a bronchial tube, the lung being filled with blood, completely collapsed, and its tissue very fragile. The heart was enlarged and dilated, the walls of the left ventricle being thin and infiltrated with fat, especially toward apex. Very slight fibrous deposit, or vegetation, in one aortic valve. The sac of aneurism so large as to contain a man's double fist, its distended, its vascular coverings having undergone such changes as to render them quite unrecognizable. The inner aspect presented a rough, uneven surface, composed of laminated fibrin and fresh blood clot. These layers of fibrin had been built upon each other into liberal proportions, so as to virtually constitute all that remained of the aneurismal sac.

(The specimen was then presented for observation.) In contemplating this case, it is interesting to observe the length of time the patient survived after such a formidable rupture, which evidently ushered in the first hæmorrhage, the inference being that the heart, temporarily relieved of its force and impetus, permitted a large-sized coagulum to block up the opening for the time, subsequent hæmorrhages resulting from the instability of the same, which doubtless was considerably guarded against by perfect repose and quiet. The usual connection between aortic aneurism and ventricular hypertrophy is again illustrated in this case. There had also been, as already stated, pericarditis, which presumably took its origin from the severe attack of inflammatory rheumatism several years before, although it is perhaps questionable if the propulsive action of the heart alone is able to produce aneurism, unless of a diseased artery. It is reasonable to suppose, however, that a disease which may produce endocarditis and pericarditis may also cause endoarteritis. The history of the case also furnishes another somewhat commonly accepted cause for aneurism, negative testimony to the contrary. Military statistics would appear to demonstrate that a large number of cases of inflammatory involvement of blood-vessels, ending in atheroma or fibrous thickening of the coats of the vessels are of

syphilitic origin. Admitting that this is by no means established, it would still appear that it is a disease, in common with rheumatism, tending to impair not only the functional properties, but the nutrition and structure of arterial walls, and is thus justly entitled to due consideration as a possible element in the case. Reasoning by exclusion, the patient had not been addicted to more than ordinary, or a very moderate indulgence in alcoholic drinks, and, therefore, can hardly be said to have furnished this supposedly frequent factor to the malady. Muscular effort or over-exertion also, as superinducing elements, appear to have no proper claim to consideration, as the patient had for fifteen years preceding death led a very quiet life, relieved from manual labor. In estimating the general causes of aneurism, it is of course an open field for conjecture, and capable of many diverse illustrations. Still, it would appear that the history of this case furnishes one, if not two, very reasonable and commonly accepted conditions leading to its development. Diseases which frequently erminate in a chronic inflammation of the internal coat of an artery may be properly classed as predisposing to aneurism, and such this case affords. Aside from traumatic origin, it is evident that structural lesions of a destructive tendency, involving the middle and internal coats of arteries, play an important part in the production of aneurism.

Thus we have the conditions most favorable to the formation of plastic deposits on the free surface, which are so commonly met with in the aorta or large vessels. From this plastic inflammatory process, commencing in the lining membrane, morbid changes are initiated involving the middle coat, which, becoming thinned by pressure, soon softens and yields, forming a kind of pouch or depression. Firm adhesions are now found between the two membranes, and we have the commencement of an aneurism. It is evident the natural tendency of such a destructive process would be to rupture, but in accordance with the wonderful preservative powers of nature, conservative forces are set into action, also the external coat becomes thickened, indurated, and supported by this deposition of plastic matter going on beneath it, until it becomes a firm and rugged barrier thus preventing for a long time, and sometimes permanently, the formation of the sac. It is,

however, inelastic, and performs no proper part in the distributing of blood which passes through it. Its caliber, therefore, must gradually dilate, its pouch-like form becoming the natural receptacle for the deposition of coagula and fibrous deposit, and the specimen affords an excellent observation of the laminated type built upon itself layer upon layer, adhering firmly to the interior of the sac, and arranged concentrically like the coverings of an onion. Its large size would seeme to indicate it had been a long time in forming.

DISCUSSION.

Dr. R. Tilley thought if syphilis was a cause of aneurism (which was remote in this case, the disease having existed prior to 12 years ago), it did not establish the fact that the man had an aneurism.

Dr. H. J. Reynolds asked if there were no murmurs present? Answered, no. There were no sounds in the right portion of the thorax. The heart was crowded out of its place (to the left) and enlarged.

Dr. P. C. Jensen inquired of the author if there were ever present girdled pains around the patient's chest at night? Answered, would hardly regard them as such. There was a good deal of pain in the right chest in the second intercostal space, especially when the violent hæmorrhages occurred.

Dr. W. L. Axford thought aneurism was not always easy to diagnosticate. The great Liston once opened what he supposed to be a boil on the chest of a man, when the patient at once sank, bleeding to death, caused by an aneurism that had been cut into.

Dr. C. E. Webster asked if there was any erosion of any of the vertebræ, or symptoms of erosion of the sternum present?

Answered no, not the least.

Dr. W. E. Clarke asked, how long before death was the patient aspirated? Answered, 36 hours.

Dr. L. H. Montgomery asked if the patient had taken iodide of potassium for rheumatism, and for the specific disease, as well probably as for the influence it may exert over aneurisms, and further, was there no incipient stage of the aneurism present a year ago?

Regarding the case reported, I am well acquainted with a brother of the deceased; a gentleman who is a carrier in the post-office, and whose family I have attended for several years. He told me that nearly two years ago the deceased had witnessed a sad accident in which his 12-year-old son had been killed; that his body was mangled horribly while he stood but a few feet away at the time the accident occurred, and he saw his boy's head crushed off. The father stood apparently motionless and speechless, his features becoming very pale at the ghastly sight he beheld. If this be so, could not the heart's action temporarily intermit, or cease to beat for a few pulsations, caused by a sort of paralysis, the result of what he had seen? It was from about this date that he had complained of more or less pain in the side and chest.

Dr. Price, in closing, stated, in reply to the last speaker, that he had treated the patient a year ago, and gave him iodide of potash in 10-grain doses three or four times a day for four weeks. Secondly, he thought the accident which had just been spoken of might, possibly, have produced the starting or incipient stage of the aneurism; and, thirdly, while the deceased was South, some ten days before death, he engaged in violent exercise, that of jumping 8 feet 2 inches. This he did twice, and became ill shortly after.

Upon motion the society adjourned.

L. H. M.

THE CHINESE METHOD OF DETERMINING PATERNITY.—A correspondent (J. H. Lowry), of the *Lancet*, gives the following bit of medico-legal evidence: A basin or cup of clean water is obtained; the supposed father's finger is cut and then put into the water till some blood trickles; then the child's finger is cut and placed in the water, and if the two bloods immediately unite the proof is complete. The magistrate is sometimes bribed and the water tampered with.

Domestic Correspondence.

NEW YORK, MARCH 19, 1884.

After a winter exceptionally eventful and exciting in many respects, the prospect of a tranquil spring in the medical world is peculiarly grateful to every member of our professional community. We have all had enough, and more than enough, of medical politics. Allusions to the Code are beginning to be so strictly tabooed that "codophobia" may be said to be epidemic. To be sure, party lines are still drawn rather severely; we have our County Medical "Association" as well as "Society," each determined to "fight it out" on their individual ethical line for an indefinite number of summers. But party spirit is no longer at fever heat. Good-nature prevails everywhere. Fierce denunciation and frantic cavillings have, for the present at least, most happily drifted into some little semblance of brotherly love. A few paltry ebullitions of spleen have abortively spluttered up from various quarters at long intervals, but have been greeted either with manifest disfavor or thorough lack of interest. As a genial old practitioner remarked to me the other day: "Exit, the Kilkenny cats! Enter, the lion and the lamb!" Now, all this may be the lull before the storm, but everybody is nevertheless heartily thankful for the lull.

The Druggists' Protective Union, however, has succeeded in raising quite a respectable tempest in the pharmaceutical teapot by an organized and plainly avowed effort to boycott certain members of their guild. The gist of the Union's "grievance" is to be found in the sale of patent medicines. The custom of selling them below the published rates seemed to be growing. The purpose of the "Union" is to pledge the proprietors of these nos-

trums to refuse to deliver any goods to those who persist in selling at a discount. The actual result accomplished has been a free advertisement for several old and well established firms, which are thoroughly equipped for such a fight. The scope of the contest has been extended to include all drugs; and it is certainly astonishing how many of our wholesale dealers have been drawn into a movement to impose a universal arbitrary scale of prices upon the retail trade. The incident scarcely requires comment, as nothing will be secured but the usual ruin of various small fry. That such a combination has assumed such proportions, does not merely show the overcrowded state of the drug trade in New York. It affords the most pitiable proof that legitimate pharmacy has not only recognized, but practically taken a second place to barefaced quackery.

The management of the Skin and Cancer Hospital (which has lately issued its first annual report, exhibiting a very respectable amount of honest work) has judiciously decided to restrict the benefits of the institution to cancer cases alone. It is designed to erect in the near future suitable suburban pavilions, as the present cramped quarters on East Thirty-fourth street have proved wholly inadequate. A "kirmess" (æsthetic for "fair") will shortly be given at Delmonico's for this purpose. A similar affair last year was very successful. An amateur dramatic entertainment will also be given this week, at the Academy of Music, in aid of an hospital for chronic invalids. Our chronic incurables seem at last to have touched the public conscience, and the profession must see to it that all the energy is utilized. Opportunities for exact, careful, continuous, scientific observation of chronic maladies are painfully few in proportion to their importance. The tendency of medical thought toward the collective investigation of disease will perhaps furnish a new impetus in this direction.

The County Medical Society have been quick to take the hint of their President, Dr. Vanderpoel, in his inaugural address, on this very subject. The following questions have been submitted to each member of the society, and discussion on the result of the inquiry is the special order for the stated meeting on May 24:

1. How many cases of intestinal obstruction have come under

your observation, and what particular symptoms were manifested in each case?

2. Have you performed an operation for the relief of intestinal obstruction due to peritoneal adhesions, and if so, what was the result in each case?

3. Have you treated any cases of intestinal obstruction, partial or complete, where the so-called pathognomonic symptoms, such as stercoraceous vomiting and obstinate constipation, were absent?

At a recent meeting of the Academy of Medicine, Dr. G. B. Fowler gave an interesting *résumé* and demonstration of the various methods of detecting albumen in the urine. He called attention to the point, that while heat will detect two-tenths per cent. of albumen, the urine should be nearly neutral, as an excess of acid or alkali will convert albumen into a form which is soluble in heat. Nitric acid, picric acid, and sodium tungstate will each detect one-tenth per cent. Picric acid, however, not only stains the fingers, but alters the color of the urine. He discarded Roberts' acidulated brine. (This last, by the way, has been very popular in many of our hospitals). Potassio-mercuric iodide was by all odds the most delicate, detecting one-hundredth per cent. of albumen. All of the recent tests give a reaction with peptones and quinine, to obviate which he suggested a simple test for peptonuria, and an inquiry as to whether the drug had been lately taken by the patient. The slightest trace of albumen deserved watching. We should not rely on a single test. As the significance of a trace of albumen in the urine was not understood, the value of these delicate tests could not be settled at present.

Dr. C. A. Doremus suggested meta-phosphoric acid as perhaps a more delicate test than any yet advanced. The general opinion of the members seemed to favor the careful use of the old heat and nitric acid tests. J. F. D.

Special Correspondence.

THE PROPOSITION TO INCORPORATE A SCHOOL OF MIDWIFERY IN THE STATE OF NEW YORK.

MESSRS. EDITORS: There are now two bills to be presented to the N. Y. Legislature at Albany, one of which is to incorporate the "New York Maternity (Hospital) and school of Midwifery," and the other is an "Act to Regulate the Practice of Midwifery in the State of New York." The last gives midwifery a legal status—allowing women who have a certificate of six months' course of study the right to practice midwifery in the State of New York. These bills were brought to the attention of the Medical Society of the County of New York in February by Dr. A. W. Warden, who was immediately appointed one of a committee to report on the matter. He kindly furnishes us with the facts here given. His minority report, which was adopted by a large majority of the society after a lively discussion at their meeting of March 24, is as follows:

"Medical Society of the county of New York, S. O. Vander-Poel, M.D., President; W. M. Carpenter, M.D., Secretary.

"The undersigned, a part of your committee appointed to investigate and report to the Medical Society of the County of New York the result of investigations relative to two acts proposed for State legislation, presented to the Medical Society of the county of New York for approval by the promoters of the proposed 'New York Maternity and School of Midwifery,' reports as follows:

"First, in regard to the proposed New York Maternity and School of Midwifery, your committee recommend that the Med-

ical Society of the County of New York do not endorse or commend the incorporation of such an institution, as not conducive to the elevation of the medical profession and the good of the community.

"Secondly, in regard to the proposed 'Act in relation to the practice of midwifery in the State of New York,' your committee find such proposed law to be not advisable, and counsel the Medical Society of the County of New York, in the interest of maintaining a high standard of qualification for the practice of midwifery, and of all branches of the profession of medicine, and in the interest of the people of the State of New York, *not to approve* any State legislation giving the right to practice midwifery, or any branch of the profession of medicine, to persons other than qualified and registered (male and female) physicians."

(Signed,) DR. A. W. WARDEN.

The *New York Times*, March 25, giving a report of the meeting at which this minority report was adopted, says:

"The ground taken by the doctor, opposed to the licensing of midwives, was that this would tend to lower the standard of the medical profession. The practice is in vogue on the Continent and in England, and has proved anything but satisfactory. It was claimed that if adopted, it would result in many ignorant persons getting license, after a few months' study, and that the number of deaths among newly-born children would increase largely. The action of the County Medical Society has been looked for with great interest by the doctors throughout the country, as there are similar movements on foot in Baltimore and Chicago. A number of the members of the County Medical Society will go to Albany to oppose the bills before the legislative committees."

THE VIRUS OF HYDROPHOBIA.—M. Pasteur made an interesting communication to the Paris Academy of Sciences, on February 26, in relation to canine madness. He stated that the disease could be communicated to a dog by inoculation with fragments of marrow or of nerve taken from a mad-dog. He also stated that he had rendered twenty dogs proof against the disease by inoculating them with a modified virus,

Reviews.

A YEAR-BOOK OF SURGERY FOR 1883. Edited by CHARLES H. KNIGHT, M.D. 8vo., cloth, pp. 197. New York: G. P. Putnam's Sons, 1884.

This volume gives in clear type a condensed review of the surgical literature of the year, under the following headings: General Surgery and Surgery of the Extremities; of the Head and Neck; of the Chest and Abdomen; of the Genito-Urinary Organs; Venereal Diseases.

Among the interesting matters mentioned are: Sciatica and thorough stretching the nerve by forced flexion of the thigh under complete anæsthesia; permanent wire suture of the olecranon and patella; dislocation of humerus reduced by Kocher's method "The elbow joint, flexed at a right angle, is firmly pressed against the side; the arm, still in contact with the body, is slowly and steadily rotated outward until firm resistance is encountered; the arm is then raised forward and a little inward, and lastly, the arm is rotated inward, bringing the hand toward the opposite shoulder;" controlling hæmorrhage in hip-joint operations by rubber bandage; results of several kinds of operations for the excision of the tongue; reports of successful thyrotomy, laryngectomy, pylorectomy, and splenectomy; danger of anæmia after removal of goitre: reduction of obturator hernia; a case of extirpation of rectum, with formation of muscular cutaneous flap preserving the sphincter; supra-pubic cystotomy; spontaneous cure of urethral stricture following obstruction from enlarged prostate.

The book is compiled from several languages, and thus presents a broad view of the surgical arena for the year. Its value need hardly be commented upon.

ON THE PATHOLOGY AND TREATMENT OF GONORRHŒA. By G. L. MILTON. Fifth edition. 8vo., cloth, pp. 306. New York: Wm. Wood & Co., 1884.

This volume of "Wood's Library of Standard Medical Authors" is an abridgment of the writer's earlier editions with the addition of considerable new material, both taken from his contributions to current medical literature, and also prepared expressly for this work.

The author would define gonorrhœa as a specific affection due to an antecedent gonorrhœa, and not the result of infection from other inflammatory processes. "A slight amount of gonorrhœa is more likely to excite the same disease in another person, than a pretty high degree of leucorrhœa is to bring on even simple urethritis."

He is avowedly unscientific, as may be illustrated by the following quotations: In one elderly gentleman, passing a bougie only gently, even though it had been done several times previously without any such result, was followed by slight discharge, etc. "Symptoms apparently as much due to excessive fatigue and thundery weather as to the instrument." We have known an *unclean* instrument to produce these symptoms in perfectly clear weather. Again, gonorrhœal rheumatism, etc., is not considered to be due to systemic infection, but to a "strictly reflex" action. It is not explained what is reflected, or where it is reflected from. Reflex action appears quite often in medical literature, as expressing simply the relation of cause and effect, apparently without consciousness on the part of the writer that it implies a definite process and certainly without the slightest attempt to show how the process is performed.

The author claims that "the tendency of the age is to exalt scientific experiment, however useless it may be, and to pass by the teachings of experience." Surely experiment is simply experi-

ence confined in definite channels, and if its many beneficial results have led the profession to distinguish the difference in value between experience and opinion, and if its careful records shall teach the value of the scientific use of language, this "tendency of the age" is hardly to be lamented.

Respecting the study of disease, the author says, and truthfully too, that the interest of medical science required "observation on a simple, uniform plan which dealt only with certainties, which admitted no case as cured or uncured unless the surgeon saw it for himself, and when the history comprehended the beginning and ending of the disease."

The body of the work is made up of a great number of facts and opinions collected from medical literature and from the author's own extensive experience, respecting the various methods of treating the disease and its complications. This is valuable, and worthy of studious attention.

His own theory of treatment is that gonorrhœa can be "cured without the use of the so-called specifics," a proposition that few will deny. Nitrate of silver appears to be his favorite local remedy, both in ordinary cases and in attempted abortive treatment. In one opinion he is firm, that the disease should be vigorously attacked and combatted through its whole course and for some time after the cessation of all symptoms, thus avoiding relapse. The work as a whole is interesting reading, and is the repository of a great amount of valuable information.

A YEAR-BOOK OF THERAPEUTICS FOR 1883. Edited by ROYAL W. AMIDON, M.D. 8vo., cloth, pp. 250. $1.50. New York: G. P. Putnam's Sons. 1884. Uniform with Year-Book of Surgery by Knight.

In therapeutics, the year has evidently been one grand raid on the micro-organisms and their germs. How to kill the parasite without killing the host, seems to be the problem put to experimental solution. In tuberculosis of the lung the patients have decidedly got the worst of it. The experiments in Berlin are

spoken of as "risky, if not reprehensible." In surgery, corrosive sublimate appears to have come to the front.

The contents of the book are arranged alphabetically, and it presents lengthy papers on Barium Chloride; Corrosive Sublimate; Therapeutic Means Directly Affecting the Local Processes of Inflammation; Physiological Action of Iodoform; Death from Methylene, and Psoriasis.

Among the minor items may be mentioned the compressed air douche; the use of amyl nitrite in congestive chill; arsenic a specific for idiopathic anæmia; production of ozone in the air by the diffusion of oil of turpentine; aseptic, straight glass catheter, with a bevelled opening, as prophylaxis of cystitis in women; kairine to reduce temperature—lastly, the parasitic origin of pertussis, resorcin being the proper germicide. C. C. W.

ECZEMA AND ITS MANAGEMENT. By L. DUNCAN BULKLEY, A.M., M.D. Second Edition, 8vo., cloth, pp. 344. New York: G. P. Putnam's Sons. 1884.

This handsomely-prepared volume contains much practical instruction relative to the management of the disease. In the last chapter there are seventy-three prescriptions for use in its treatment. As will be seen by his definition, the author lays great stress on itching as a characteristic of the disease, and excludes all inflammations of the skin that are the result of external irritation. "A non-contagious, inflammatory disease of the skin, of constitutional origin, acute or chronic in character, manifesting any or all the results of inflammation at once or in succession, and accompanied by burning and itching." In respect to the constitutional origin, the author considers that all cases arise either from a scrofulous, gouty, or neurotic state. He wastes much ink and paper in explaining these diatheses, and the practical outcome of the whole matter is that the constitutional cause of eczema is undiscovered.

A diathesis is something from its very nature intangible and indescribable; it never can be diagnosticated during health, for healthy people do not apply to a physician, and after the inva-

sion of any disease the general features of the case show no longer a diathesis, a predisposition to the disease, but a cachexia, the results of that disease. If the diathesis could be diagnosticated during health, it would do no good, for there are many diseases ascribed to each diathesis, and the patient, his condition being inherited and not amenable to treatment, would live in constant fear, not knowing at what point to guard himself. If this ghost of demonology could be exorcised, and men would be content to study diseases and their treatment, rather than the figments of their own imaginations, humanity would be the gainer by it.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. Edited by JOHN ASHHURST, JR., M.D. Illustrated with chromo-lithographs and wood-cuts. In six volumes. Vol. IV, 8vo, cloth, 987 pp. New York: William Wood & Co. 1884.

This volume contains the following articles:

Injuries of Bones, by John H. Packard, M.D., a systematic and exhaustive study of the fractures of the bones and cartilages and their treatment. It occupies 260 pages, and contains 49 wood-cuts.

Diseases of the Joints, by Richard Barwell, F.R.C.S., 177 pages and 46 wood-cuts. This paper is written in a pleasing style, which gratifies the ear, although it may obscure the sense.

The author's idea of pathology may be fairly illustrated by the following extract: There are two varieties of struma. In one "the head is large and uneven, big behind; the ears are large and stand out widely; the undecided, thick, under lip is apt to droop; * * * add to this a dull, coarse hair, gravel-colored or lusterless black," and we have the type which tends to the scrofulous diseases. "The characteristics of the other kind are much more pleasing, indeed often exquisitively beautiful; the thin skin, almost translucent in its delicacy, either of the milk-and-rose or of the soft brunette complexion, covers features of the finest form and most refined modelling; the long eyelashes fringe their lids marked with a delicate tracery of wander-

ing veins;" etc., etc. This type tends to tuberculosis. All this is very nice on paper, but it leaves so broad a ground for differences of opinion that it becomes simply a matter of opinion, and is hardly worthy of a place among scientific facts.

It would appear from our author's description, that only those children were strumous who are particularly ugly or particularly beautiful.

Excisions and Resections, by John Ashurst, Jr., M.D., 96 pages and 77 wood-cuts. This paper contains the descriptions of the operations and the tabulated results of many hundred cases.

Excision of the Knee-Joint, by George E. Fenwick, M.D., C.M., a short paper giving a table of twenty-eight cases.

Tumors, by Henry Trentham Butlin, F.R.C.S., 113 pages, several wood-cuts and four good lithographic plates, showing 31 figures of microscopic preparations. There are also several horrible colored representations of tumor, *in situ*. They are neither artistic in finish or exact in detail. The text is clear in its descriptions and conveniently arranged for reference.

Injuries of the Back, by John A. Lidell, A.M., M.D., 223 pages, four wood-cuts. Nearly one-half of this lengthy paper consists of the reports of cases largely from military practice. In many instances these quotations are from careless observers, and often they poorly illustrate the topics under which they are cited. Speaking of the temporal and carotid arteries, he thus quotes from one author: "In fact, the action of these vessels coincided in neither force or *frequency* with that of the radial and ulnar arteries." The only explanations that occur to us for this, is that either there was marked dicrotism of the pulse in one set of vessels and not in the other, or, what is more probable, that the observer was grossly at fault. We would respectfully engage that the New York *Sun*, vid. page 716, while it may be never so reliable an authority as to matters of fact, should hardly be quoted in matters of opinion requiring special surgical knowledge. The writer strongly advocates the immediate reduction of dislocations, with or without fracture of the spine. He fully illustrates the fallacy of expectant treatment, as well as the strikingly beneficial results of active surgical interference. Respecting

concussions of the spinal cord he is again very unfortunate in his quotations.

In the most striking illustration given is the following expres sion "Autopsy. * * * The substance of the cord was *contused* opposite the fourth and fifth cervical vertebræ." This is on page 790, while on page 794 the same case is quoted from Bryant, and credited to Guy's Hospital Reports, 3rd series, vol. V, it should have been vol. IV, as illustrating *contusion* of the cord. This confusion is evidently the result of careless compilation. The author points out the danger of inflammation of the cord and its membranes, arising from traumatic causes, and gives lengthy descriptions of the secondary results of injury to this organ, as sacro-gluteal eschars, disorders of the urinary organs, etc.

Malformations and Diseases of the Spine, Frederic Treves, F.R.C.S. This concluding paper occupies 72 pages, and has a few cuts. It is far from exhaustive, and is particularly defective in its consideration of the treatment of Pott's Disease, the theory and application of the antero-posterior splint being briefly and poorly stated, while the plaster of paris splint, an appliance having a much narrower range of usefulness, is unnecessarily enlarged upon. C. E. W.

A WOMAN WITH FOUR MAMMARY GLANDS.—Dr. W. E. Whitford, of Rossie, N. Y., writes that he was recently called to see a woman, aged 38, mother of five children, who was suffering from an abscess in one of her breasts. About three inches below the nipple on each side, there were miniature mammary glands. After confinement these would become quite large, and secrete milk for about two months.

ERRATA.—In the article on Reduction of Dislocations, by Prof. Gunn, published in this number, the following corrections should be made:

Page 451, twentieth line from top, for seven read three.

Page 462, in description of Fig. 6, for setted read settled.

Page 466, in description of Fig. 10, for posterior read anterior.

Selections.

ON A NEW MODE OF OPERATING FOR FISTULA IN ANO. By EDWARD W. JENKS, M.D., LL.D., Chicago.

Although diseases of the rectum and anus do not belong exclusively to the domain of gynecology, they are of such common occurrence among women, and are so frequently encountered by the gynecologist, either associated with other pelvic disorders of women or as the only disease of that region, that the writer offers no apology for presenting to the Society a brief paper with the foregoing title.

It may not be the part of wisdom to entitle any mode of operating or plan of treatment as new, in view of the fact that the history of medicine shows that much which we term new was known hundreds of years ago. I have, however, ventured to designate as new the operation described in this paper, for the reason that I find nothing analogous to it described in modern works.

In all literature on the subject of fistula in ano, including the latest systematic treatises on rectal and anal diseases, may be found frequent allusions to incontinence of feces and flatus following, and consequent upon, surgical operations in the anal region. As this is dependent on the condition of the sphincter muscles, it differs greatly in degree, from slight weakening to total loss of contractile power—*i. e.*, partial or complete incontinence. It is not uncommon for partial incontinence to succeed an operation for fistula in ano when done by skilled hands and after the most approved method of the present time. Allingham says: "In operating upon women suffering from fistulæ, cut as little as pos-

sible, for anything like too free incisions are apt to end in incontinence of feces, or, at all events, in such partial loss of power in the sphincter as to prevent the patient retaining flatus, a result which, I need scarcely say, is a most disagreeable one." "A patient who suffers from inability to retain flatus or feces is in a most unpleasant condition; in fact, some sensitive persons would not undergo any operation which was at all likely to induce such a state, and would prefer any physical suffering rather than the perpetual fear of being in any way offensive to others." A surgeon of distinction, who has given special attention to diseases of the rectum, recently informed the writer that among the many anal fistulæ he has incised "the number is few in which the function of the sphincters is as perfectly performed as it was previous to operating." I understood by his remark that, while there was not what he designated as actual incontinence in any degree in the majority of his cases, there was less control of liquid feces and flatus than existed before the sphincters were incised.

A little over a year ago I was consulted by a woman on account of rectal incontinence. This condition was caused by an operation for fistula which scarcely involved a single fiber of the upper sphincter. The operator in this case was not an experienced or distinguished surgeon, this being his first operation about the rectum. The causes of incontinence, in my opinion, were: (*a*) a perineum previously weakened by being torn in childbirth, and (*b*) the cutting of the lower sphincter obliquely.*

Two cases have quite recently been brought to my notice of complete incontinence succeeding operations for fistulæ. Both of these women were operated upon by gentlemen of experience and acknowledged skill. In each the internal sphincters were cut, but not entirely through. One of these women, since her operation for the fistula, has been subjected to two additional operations for the incontinence, without deriving any benefit therefrom.

A suit against a surgeon for malpractice which is now pending

* My own observation has convinced me that Allingham has not overestimated the importance of incising the sphincters at right angles to their muscular fibers, and that even an oblique incision of the lower sphincter may result in complete incontinence.

in one of the courts of a Western city, involves the subject under consideration, and is of sufficient interest to deserve more than a mere allusion. One trial, resulting in a disagreement of the jury, has been held, and another, which has been ordered, will soon occur. In this instance suit has been brought by a woman against a surgeon of prominence, in which she claims damages to the amount of several thousand dollars on account of the unskilful and improper performance of an operation for fistula in ano upon her own person by the defendant in the case. She states that, although she suffered inconvenience and discomfort prior to the operation for the fistula, she is now, by reason of fecal incontinence, in a much worse condition. She has made the suit appear still stronger in her favor, as I have been informed, by testifying that she has undergone an additional surgical operation for the purpose of curing the incontinence, but has derived no benefit therefrom.

From all I can learn relating to the treatment of this patient, the surgical operation was performed as it is generally done by surgeons, and after the manner advised by the majority of modern authorities. My friend and former pupil, Professor H. O. Walker, of Detroit, was an expert witness in this suit, and while in conversation with him concerning it, and of the various modes of treating different forms of anal fistulæ, it occurred to me that some cases might be successfully operated on by a method similar to the operation for a torn perinæum. By so operating, it seemed both to Dr. Walker and myself, that immediate union would be secured, a tedious convalescence avoided, and incontinence rendered impossible.

I have not had the opportunity of performing the operation which I have designated as a new one for fistula as many times as I would like before bringing it to the notice of the Society, but my limited experience has led me to fully believe that it is an improvement upon the method of incising and expecting the gap to be healed by granulation, and also that it is of sufficient importance to merit a trial at the hands of other surgeons. I have had but two patients upon whom I have tried this operation, and with each the success was all that could be desired.

The mode of operating as I have performed it may be briefly

described as follows: First, after determining the routes of the fistulous tracts, they are incised after the usual method, aiming, in every instance where the incision involves either sphincter muscle, to have the incision at right angles to the muscular fibers. The next step is to carefully dissect out the so-called pyogenic membrane, or all of the lardaceous tissue and the cartilaginous substance along the route of the fistulæ. This can be done with curved scissors or a cutting curette. It is not unusual to find several bleeding vessels in the fistulous tract; these should be secured by torsion in preference to ligatures, but if ligatures become a necessity, then Chinese silk is to be preferred. The surgeon frequently finds, after cutting a fistula, that there are, overlapping the incision, portions of thin livid skin of low vitality. This should be entirely cut away in all instances, but in the operation under consideration the edges of the incised skin should be pared until they can be brought together perfectly, and then, by deep sutures, the incised parts maintained in perfect apposition until adhesion is effected. The deep sutures can be adjusted in the easiest manner by a Peaslee's needle or the common perineal needle, and should be buried beneath the bottom of the incised fistulous tract, so that no portion is visible except the two ends protruding from the integument. In addition to deep sutures, it is in most instances necessary to insert superficial sutures alternately with the deep ones, that the strain upon the latter may be lessened and the edges kept in apposition. The severed portions of the sphincters are united by sutures in the same manner as is done in complete laceration of the perinæum, for the knowledge of which we are indebted to our distinguished Fellow, Dr. Emmet. If an operation for anal fistula by the method advocated here proves a success, it is mainly owing to the severed ends of the sphincters having been held in perfect apposition a sufficient length of time to effect their union. For this purpose silver-wire sutures properly adjusted are, without question, preferable to silk. I have used both silk and silver with equally good results, but prefer the latter, deeming it the most reliable if the operator has been accustomed to its use in surgical work.

If an opening into the rectum of the tract of the fistula is of

such a height that its incision includes any portion of the internal sphincter, it is necessary to use additional sutures within the rectum to bring and maintain in apposition such incised parts as the external sutures will fail to do.

I have used for this purpose Chinese silk, for the reason that, while sutures of this material are commonly of sufficient strength to hold the parts together until union is secured, they do not require removal by the surgeon, as they are discharged in a few days. If it is deemed desirable for any reason to use stronger sutures, the best material is "ironized silk" * (1 to 3), because of its black color, which renders it much easier than white silk to remove from the rectum. In case of there being several fistulous openings in the rectum, an attempt to cure all of them at one operation by this new method would doubtless result in failure. The same is true of the ordinary mode of operating, as is well known to all who have had much experience in rectal surgery. With several incisions left to heal by granulation when the sphincters are included, incontinence is quite sure to follow. We are advised, by those who are entitled to speak authoritatively on the subject, that for this reason an attempt should not be made to cure all by a single operation. In the mode of operating which is advocated in this paper, more sinuses can be safely cut than by the old method, and yet too much should not be attempted in one operation. Very much depends on the character of the fistulæ; as for instance, if there is anything like the ulceration common with consumptives at the rectal end of a sinus, an attempt should not be made to bring the rectal edges together by sutures; yet some of the other sinuses can be incised and be made to unite by sutures; nor should any fistula be incised if it is acutely inflamed. In either one of these conditions pus would be very likely to burrow and new sinuses be formed. Allingham gives this as a reason why we "should never operate on a fistula that is from any cause acutely inflamed."

The route of an internal fistula may be straight or tortuous, and, if either, sometimes it will run close to the mucous mem-

* I am indebted to Prof. William H. Pancoast, of Philadelphia, for suggesting the use of ironized silk in the operation, and its advantage in this and other operations pertaining to gynæcological surgery.

brane and have its rectal opening above the internal sphincter, or it may run behind both sphincters and open above the internal, or, while extending a distance above the internal sphincter, as a probe indicates, its rectal opening may be quite a distance below its upper limit. If such fistulæ are incised their entire length, and then left to heal by granulation, incontinence in some degree is inevitable. If some of these fistulæ are not too deep, or do not communicate with abscesses, they may be cured by the method heretofore described. In the absence of exact knowledge concerning the use of sutures, in case all the fibers of both sphincters have been cut through, I deem it the best and most prudent course to pursue, when such incisions seem to be required, to insert an elastic ligature at the upper limit of the fistulous tract, and after causing it to cut through the internal sphincter at right angles to its muscular fibers, the remaining portion may be incised and united by sutures in the manner already described, or left to be cut entirely through by the elastic ligature, as in the judgment of the surgeon may seem best in each case.

It is as impossible to follow any exact rules as it is needless to give them for the surgical treatment of fistulæ; especially is this true of many internal fistulæ. While, in my opinion, there are some fistulæ in which sutures are better than any other mode of treatment, others can be more certainly cured by means of the elastic ligature; then, again, there are doubtless some which can only be treated by being incised and left to heal by granulation.

As regards the manner of adjusting sutures, the same exact rules cannot be followed as in perineorrhaphy, or other plastic operations about the pelvic organs, for the reason that there is such a lack of uniformity in the shape and location of fistulæ. For the purpose of obtaining success in the operation under consideration, adherence to the general rules of surgery, the teachings of experience, and the ingenuity of the operator are requisite in each individual case.

Having described the mode of operating in anal fistulæ, and endeavored to show its advantages, I will further illustrate this method by an account of cases operated on:

The first patient was an inmate of my private hospital, Mrs. A., age 25; nulliparous, of a strumous diathesis. The fistulæ had troubled her four years. She had two distinct fistulæ, opening into the rectum half an inch apart; one fistulous tract was straight, having its external opening in the direction of the tuber ischii, opening on the left about two inches from the anus, while the internal was immediately below the internal sphincter. The other fistula had its tract above the first, and its external opening in the fleshy part of the left buttock, three inches and a half from the anus. There was, in addition, a lateral sinus in the form of a blind fistula leading from this one, and situated about midway between the rectal and external orifice, and directed upward. The first sinus was incised, packed with marine lint, and allowed to heal by granulation. The second one, with its lateral branch, was treated after the method advocated in this paper. As this was an experimental operation, I was slow in carrying out the details. The tract of the fistula was carefully cleared of all adventitious tissue by means of small curved scissors, the edges and deeper parts trimmed, and bleeding vessels secured by torsion, as has been previously described; then sutures were inserted so that no part was visible in the wound. This was done with great care beneath the tract of the main sinus and its lateral branch. The severed sphincter was brought together by sutures in a manner similar to Emmet's operation for complete laceration of the perinæum. It could then be seen that within the rectum there was a gap that needed to be closed, or else the fistula would remain unhealed. Four interrupted sutures of Chinese silk were used within the rectum for this purpose.

Nine days later, after a thorough evacuation of the bowels, all sutures excepting those of Chinese silk were removed; union was complete the entire length of each sinus. The other sinus, which had been simply incised and packed with marine lint, required a continuation of similar treatment for over a month before the gap had healed by granulation. This one might have been cured in the same time as the others if it had been treated in the same manner, as it was a more favorable case for the use of sutures than the others; but, instead of being healed in ten days, as the others were, it kept the patient confined to her room for weeks,

requiring daily dressings and causing discomfort that might have been avoided.

The second case was in private practice, the subject being Mrs. B., age 32; a widow. She had borne two children, and her perinæum was torn to the external sphincter. The fistula had existed for six years, and was attributed by her to a difficult instrumental labor from which she was seriously ill several weeks. The external opening of the fistula was on the left side, two inches and a half from the anus; the route of the fistulous tract was quite straight through one edge of the perinæum to its rectal extremity in the recto-vaginal septum, at the lower margin of the internal sphincter. The appearance of the fistula after being incised was similar to that of a large-sized artery. The dense cartilaginous substance which caused this appearance was carefully dissected out by means of small, sharp-pointed scissors.

There were no pockets for the retention of pus, no lateral or crooked sinuses leading into it; but, after being cut, and all the livid skin was trimmed away from the edges, its appearance was similar to a recent incision which would readily heal if it was properly brought together, and so maintained for a sufficient length of time. This was done by means of sutures inserted in the same manner as in the first case. Within the rectum three interrupted sutures of Chinese silk were introduced. Convalescence was rapid; the bowels were moved by means of laxatives and an enema on the ninth day. On the tenth day all external sutures were removed, two of the rectal sutures had disappeared, and no attention was paid to the remaining one. Union of all portions of the late fistula seemed to be perfect, and a cure was effected.

In concluding this paper, there are a few points to which I desire to direct attention:

1. In my own opinion, while this mode of operating is not adapted to *every* form and variety of anal fistulæ, I believe it by far the best method in the majority of cases.

2. The long and tedious convalesence inseparably connected with the ordinary mode of operating is by this mode avoided.

3. Other advantages of this mode of operating are (*a*) securing nion by the first intention, and (*b*) the prevention of incontinence.

4. In cases where the external sphincter has become rigid, it is not easy to hold its incised ends in close apposition without forcibly dilating it with the thumbs prior to operating, or else by an incision opposite the tract of the fistula of sufficient depth to temporarily paralyze the muscle. In this way the sutures in the sphincter will render better service.

5. For the purpose of facilitating the introduction of sutures within the rectum, there are two means, as follows: (*a*) the introduction into the rectum of a Sim's speculum; the eversion of the lower part of the rectum by means of one or more fingers being introduced into the vagina, and then turning out a portion of the rectum through the external sphincter.

THE GULSTONIAN LECTURES ON NEUROSES OF THE VISCERA. Delivered at the Royal College of Physicians, March 14, 1884. By T. CLIFFORD ALLBUTT, M.A., M.D., F.R.C.P., Lecturer on Practice of Physic at the Leeds School of Medicine; Consulting Physician to the Leeds Hospital for Women and Children.

GENTLEMEN:—When the revered chief of this college bade me to the high place which I now hold, I would fain be released from so great a call. It seemed to me that the leisure in which I should search out and think things worthy of so distinguished an assembly had long been denied to me. But I was assured that, although lectures containing the results of systematic research are of the highest importance, there is a place, nevertheless, for lectures conveying the humbler reflections of working physicians who deal with the daily experience of the sick room and the consulting chamber. It remained for me, therefore, to obey, and to deal with some part of the field of practice. Herein I have chosen for my subject those painful disorders which have their seat in the nerves of the viscera, but I have entitled my lectures "The Neuroses of the Viscera," in order that I should be free to enlarge occasionally upon some perturbations of those nerves which are not attended with pain, strictly so called. At the

same time, it is with such neuroses as are manifested in pain that I intend more especially to deal. It seems to me that in our text books these affections receive something less than the full treatment which their difficulty and importance demand, and I find, in general practice, that the part played by the nervous system in visceral disorders is insufficiently seen. To the knowledge and skill of physicians so highly placed as yourselves I can not hope to add anything, but I would rather seek, through you, and with your aid, to spread abroad a more adequate interpretation of the disorders in question.

It certainly happens that neuroses above the belt are far more clearly understood than those below. This preference is due in part to the renewed impulse given to the study of thoracic disease by the discoveries of Laennec, partly to the more vivid functions of these parts, functions which excite our admiration and interest in greater measure than the brooding and silent life of the organs of vegetative existence. Of the neuroses, then, of the upper chambers of the body, of migraine, of asthma, of angina pectoris and the like, I shall find but little to say; my attention will be confined almost entirely to the pains and storms of the abdominal regions—to gastralgia, nephralgia, hepatalgia and their allies. Of the neuroses of the pelvic viscera much has been said. Indeed, if thoracic neuroses have been discussed at their actual value, if those of the abdomen have received less than their due meed of attention, surely those of the pelvis have received an attention, if not beyond their importance, at any rate of far too exclusive a bearing. What I say of these last will be little in description, but more in the way of interpretation.

The first strong impression which I received from the facts of the class with which we now concern ourselves was obtained from the index of my case books. It has been always my custom to index therein the names not only of my patients, but also of their maladies. I have to each volume two indices, one of names, one of diagnoses.

As each year I have prepared the spaces for these tables, I have been struck with the small space occupied by the malady "dyspepsia." Surely, I thought, if there be one malady which

above all others should need a large space it must be dyspepsia. Yet year by year, as at the end of them I cast my eye over the tables, was I astonished to find my cases entered as "dyspepsia" to be a mere handful. How could this be? I asked myself repeatedly. "Martyrs to dyspepsia" are to be found at every street corner, and are said to form something little less than the staple of those who drift from consultant to consultant. Moreover, I had some suspicion that I was in repute as a stomach-doctor, and was, at least, conscious of a readiness to receive such cases, and to work patiently with them. I thought also of that long suffering organ itself, and its work—of the greediness or recklessness which make it the helpless receptacle of all sorts of rubbish; I pictured to myself the contents of the viscus distended with greasy, acidulous, or trashy matters, sodden in half-fermented gooseberry-juice or sour claret; and I stood amazed that it resists destruction. Yet not only does it survive, but it patiently draws order out of disorder, sweetness out of foulness. Again, as I turned to the journals of the day, I read of men of lofty endowments, whose lives became accursed by dyspepsia; and on other sheets I read many columns of advertised solace, from wind-pills to the pill of the American doctor, whose virtues were thus rendered at Cambridge:

> "Hæc jecur instigat, stimulos hæc renibus addit,
> Ambulat arcanas hæc taciturna vias.
> Attamen hæc eadem latebras penetralibus imas
> Mordacis buxi more modoque petit."

Our medical journals all tell us the same story. Every large drug-house has its pepsines, its dinner-pills, its cordial bitters, testifying not only to the general, but to the medical, cry for help against the demon of dyspepsia. Finally, so confident is the public of the true form of its enemy, that one of this sort who seeks the doctor will dictate his diagnosis, declaring himself an old dyspeptic, and demanding your specific. A hundred doctors have pronounced him dyspeptic; needlessly, for who can know it better than himself! He will condescend, perhaps, to admit some discussion of the respective vices of his stomach and of his liver, but he is offended if you seek further. He half tells you that, if you have yet to learn what is meant by a dyspeptic or by "biliousness," you are no man for him. Patients have

positively left me in dudgeon because I ventured to hint that the word indigestion expresses rather an inference than a fact, and pointed out that diagnosis belongs to the physician. and not to the client.

How is it, then? How are we to explain this catholic wailing over a disease which is not; this wealth of balsams for sufferings which cannot be named? Is there no distress to lull, no pain to lenify? In turning our minds to this question, let us, in the first instance, consider the meaning of the word dyspepsia, and ask ourselves if there be in it any such confusion as may account for its indefinite uses, and whether in such uses there be equivocations such as to account for the doubts to which I have referred. I believe that, if I thus follow the origin and paths of my own thoughts in the past, I shall best open out the main subject of my address. Forgive me if I thus approach the subject of visceral neurosis by an indirect method, and in the way of comment upon the affections of the stomach. It is almost trivial to remark that dyspepsia, strictly speaking, is not a disease, but a symptom; it names not the causes nor the processes of the evil, but its consequences; that, as an outcome of the affair, whatever it may be, food is not digested, or is digested imperfectly or painfully. Taken in this sense, no doubt dyspepsia is an exceedingly common complaint. But if the word be used in this sense, does not its meaning become almost futile? As a consequence of various conditions, let us say, persons may find themselves unable to walk far, to walk steadily, to walk painlessly, or even to walk at all. Yet are we to use a word such as dyskinesis, and to say that whosoever comes to us walking ill, whether from general debility, from palsy, from sciatica, from muscular rheumatism, from gout, from disease of foot, ankle, or knee, that he is suffering from dyskinesis? Are we to say, of a patient whose forces are so diminished that he can only walk a mile, and this with fatigue, that he is suffering from atonic dyskinesis? Are we to treat all the above maladies in a chapter under the heading of dyskinesis, and in a few columns of entanglement try to deal intelligibly with such a subject in such a way? We should not be saved from the discredit of foolishness if we were to do so. Then, how are those to be spared who, using the word dyspepsia in this way,

devote chapters and books of chapters to such a symptom, and raise that which is accidental and consequent to the place and name of a definite malady? Yet I have only to turn to any modern text-book to find page after page of such writing, pages to which I would willingly refer accurately, were it not that I would avoid even the seeming of personal controversy with authors whose industry and thoughtfulness have done so great a work for modern medicine. If, however, we would speak wisely and strictly, shall we not seek to clear away this kind of confusion, and set out in their natural groups, as distinctly as we can, the several classes of symptoms now heaped together unreasonably? Thus we shall better understand the cases which come before us, and taking a larger view of them, see better how to cure them. Perhaps, too, by this method, we shall even do away entirely with the word dyspepsia as the name of a malady, and reduce it to the position, for instance, of the word cough, which has no definite connotations, and signifies only an inconvenient and notorious symptom common to many maladies.

Sifting, then, as we must, the heap of affections attended with dyspepsia, we readily enough propose four chief groups of stomach disorders. First, those which are due to grave disease of the stomach itself, such as cancer or ulcer of the organ, dilatations of it, atrophy of its coats, and so forth. Secondly, to diseases of the stomach less grave, but still local, such as the simpler catarrhs, acute and chronic gastritis. Thirdly, disorders which depend upon no visible changes in the structure of the stomach, but consist in some disorder of its work or secretions, and which, in accordance with a convenient use of words, we call functional; the dyspepsia of gout may perhaps be taken as an instance of this group. Fourthly, disorders which depend, not upon any primary derangement of the tissues of the stomach, but upon some influence coming from blood or nerve, from which influence visible local changes may or may not ensue. We put aside the first class of cases, without difficulty, as quite foreign to our purpose; and, so far as they can be distinguished, we put aside the second class also. This it is easy to do in the instance, say, of chronic or acute gastritis caused by the excessive use of alcohol; or,

again, in the instance of that common and transient catarrh of the stomach attended with loss of appetite, headache, coated tongue, constipation, sickliness and malaise, which is due often to cold, often to improper feeding. This affection accounts for a large number of the cases called bilious attacks, though the majority so called are probably migraine. It is easy to make some such progress as this, but thenceforth it is not easy to plan out our schedules further. We may leap over a score of doubtful cases, and passing at once to another extreme, separate into a class all cases which are obviously neuralgic; but between these positions lie a great number of cases which are hard to classify. Is pyrosis, for instance, some local affection of the coats of the stomach, or is it a neurosis? Is flatulence, are all acid risings in the stomach, due to some irregular transmutation of the contents of the organ, or are some of them consistent with the course of normal, if feeble, digestion? In the former case, such derangements may fairly be called dyspepsia, for the process of digestion goes wrong, not as a detail or subordinate part of larger or systemic irregularities, but as a simple and local error in the digestive work of the stomach itself. In a word, is stomach derangement, in a given case, but an expression of some general derangement, or is it a substantial ailment, and the cause rather than the consequence of any more general perturbations. Even these may be very difficult to estimate, or may be decided only on the study of individual cases, but a large number of cases remain which are yet even harder to interpret, cases in which dyspeptic symptoms are no doubt due to disordered work or secretion in the stomach, but in which this disorder of work or secretion may, in its turn, be due, not to any primary defect in that organ, but to some cause lying outside of its peculiar tissues, lying, for instance, in the blood or in the nervous system. Omitting, as I must do, all reference to blood changes, let us take as an extreme instance a sudden nervous shock, which may arrest digestion completely, and we may thereafter conceive of lesser degrees of nervous perturbation, which may bring up a continued interference with digestion, or, in other words, cause a continual dyspepsia. We may conceive, indeed, that not only in this way digestion may simply be slowed, but also the peptic secretions or

processes be positively vitiated, as is the case, say, in neurotic diarrhœa.

Or, to turn to a different point of view, a patient who suffers from many symptoms indicative of nervous derangement tells you that on the empty stomach—generally in the morning, before breakfast—a dense, yellow, oily fluid gathers, and, lying there all day, would vitiate the viscus, would act as an eccentric cause of headache, and as a foul ferment upon the food in the course of digestion; so that his or her only hope of a comfortable day is to vomit or wash out these dregs at the beginning. Now, such an exudation may be due to some chronic distemper of the coats or glands of the stomach; but I incline to believe it is due rather to some perturbed innervation of a stomach otherwise healthy, seeing that the symptom is one which I have always found in neurotics, and to be curable only by treatment planned mainly upon this diagnosis. Disordered work and distempered secretions, then, may well be due, and doubtless often are due to neuroses of the stomach; and such neuroses, lying between the more localized disorders and the purer neuralgias, are difficult to classify. There is one more difficulty, though in practice a less embarrassing one; namely: that, as distempered secretion may be the effect of disordered nerve, so, reversely, some slighter catarrh, or other local change, or some offending article of diet, or, again, some graver local mischief, may, as peripheral irritants, set up nerve disturbances, which, in certain susceptible persons, may so wax as to overshadow or conceal the primary cause of their occurrence. We know, for instance, that the touch of a bronchial attack, or of an acute pneumonia, may first reveal an asthma till that moment wholly latent—latent, it may be, till middle or even later life; or latent it might have been, like the unwept tear, forever. But the sleeping ill, once awakened, rarely recedes again altogether, but, by its own recurrence, tends to rivet upon the sufferer the chains of habit.

Thus it may become difficult to say which is the predominant factor in the consequent group of discomforts. As a practical difficulty, it is most serious in cases in which ulcer may or may not be present; and I do not hesitate to say, gentlemen, even before you, that in some of these the diagnosis between ulcer and

pure gastralgia is, in certain stages, impossible. How are we, then, to succeed as ministers to the sick if we crowd into one chapter, and almost into one point of view, the pure neuralgias of the stomach, the neuralgias awakened by local irritations within the viscus, disordered secretions or metabolisms within it due to perturbed innervation, together with primary dyspepsias of local origin which concern the nervous system but little or not at all? Never can we succeed, I think, if we make such a confusion. We must endeavor, then, not only to separate the pure neuralgias from the dyspepsias or pains of local origin; but, however difficult it may be in any one instance, we must endeavor farther to decide concerning mixed cases, whether the neuralgiac phenomena stand in causal relation to the local disorders of function, or contrariwise, the disorders of local function have awakened nervous reverberations. That which reason and examination may fail to discern may often be revealed to us by the test of treatment. The relation of asthma to disorders of the lungs has been quoted as an illustration of these difficulties. In some cases, then, we have to deal with a pure neurosis of central origin; in others, with nervous phenomena awakened by persisting or foregone local maladies; and unless we see with some clearness how these phenomena are related to each other, we shall fall short of a rational therapy.

In order to enter by the plainest route into the more intimate knowledge of neuroses of the stomach, let us advance from the simplest to the more complex. No cases, perhaps, will serve us better as an introduction than those in which disorders of digestion occur as a consequenee of general nervous exhaustion. Unlike gastralgia, these disorders may arise in men and women of very various habit of body. No general sketch of the bodily aspect, nor of the temperament of such patients, can be delineated, and accordingly we find the symptoms various.

Omitting, then, persons disposed to gastralgia, we find two kinds of dyspepsia at least arising in persons overworked. In the first class, we find simply a feeble stomach, as we find enfeebled legs and enfeebled brain. The tongue is clean—too clean; not red, but pallid. Its substance is œdamatous, and its edges indented. Such a person has no appetite, and the little he eats causes a weary

sense of repletion until the ingesta slowly pass off. We may call this dyspepsia, as we may call the leg weakness dyskinesis, etc.; but the whole man is run down—call it general dysergy, if the phrase is acceptable. But now take another man equally without diathesis, and equally overworked; his tongue is bulky and also indented, and is protruding slowly, spreading as it issues. It is thickly coated, especially towards the mid-line, where the fur is brownish, and brownish towards the back also. The complexion is muddy, and the countenance bears the marks of mental depression. The hand is placed fretfully upon the vertex, where there is a pain, or if not a pain, a peculiar indescribable uneasiness; and this passes backwards surrounding the occiput. The urine deposits lithates, and the liver and stomach not only work feebly, but their functions are aberrant. He is weary and dull, and says he feels like a dead dog of a morning. A like state of tongue, and a like sluggishness and diversion of stomach, liver and colon, may be seen in most cases of common apoplexy, and are clearly secondary to the troubling of the brain, though the converse view is usually held, and the attack of apoplexy attributed to a foregoing upset of the digestion. Why, of the two overworked men, nervous exhaustion should produce in one a simply atony of the stomach, and in the other an aberrancy, I cannot say. I suspect the latter man has in himself some echo of gout, but yet I know how disappointing are all attempts to clean his tongue and set his stomach aright with the stock rhubarb and soda mixtures, with pepsines, with calomel, colocynth, or colchicum, and how that even strong tonics, such as quinine and iron, may be prescribed with benefit, and how rest and upland air will beat all medicines whatever, and will clean the tongue in a fortnight. Dyspepsia here is a symptom, and the stomach is disordered; but radically the state is a neurosis, vascular or other, and curable only upon this understanding.

That which I have illustrated by the examples of the stomach may be likewise illustrated by examples taken from the other viscera. Jaundice may be set up simply and directly by causes acting upon the nervous system, or it may be due to local causes only. Or again, it may owe its origin to some admixture of the two sets of causes. So again, in the functions

of the intestines, either constipation on the one hand; or diarrhœa on the other, may be due to nervous causes acting alone, to local causes acting alone, or to local changes, reinforced by nervous reactions. I will only refer in this connection to one more organ out of many—to the uterus and its appendages. How intimately this organ, or this system, is associated with the nervous system, is well known, but, unfortunately, the weight of our knowledge all leans one way—it leans to a curious and busy search for every local ill which may arise in the female pelvis, while blind oblivion scatters the poppy over every outer evil, which in its turn might hurt the uterus—nay, more, a resolute prejudice would deny that, in the woman, any distress can arise which owes not its origin to these mischievous parts. "L'utérus c'est la femme," is a proverb which has received a new development in these days; for if by courtesy, rather than by conviction, woman be granted the possession of a few subsidiary organs, these, at best, have no prerogative nor any order of their own.

The uterus has its maladies of local causation, its maladies of nervous causation, and its maladies of mixed causation, as other organs have; and to assume, as is constantly assumed, that all uterine neuroses, or even all general neuroses in women, are due to coarse changes in the womb itself, is as dull as to suppose that the stomach can never be the seat of pain except it be the seat of some local affection, or that the face can never be the seat of tic-douloureaux unless there be decayed teeth in the jaw. All mucous membranes, indeed, seem readily to betray nervous suffering by relaxation or changed secretion; and I make no doubt whatever that a very large number of uterine disorders which are elevated to the place and name of diseases of the uterine system, are but manifestations of neurosis. All neuroses are commoner in women than in men. Facial neuralgia is commoner in them, migraine is commoner; so is gastralgia, again, and the pseudo-angina. Not only so, but, in the uterus, they possess one organ the more, with its own rich nervous connections, and its own chapter of added neuroses; but to say that all these maladies are due primarily to uterine vagaries, is to talk wide of all analogy. Again, some men as brave as others feel equal sums of

pain far more acutely than the others; women, speaking generally, feel pain more than men do; patient as they are, they seem to have less reserve of force and less resistance, more susceptibility and resentment, and less capacity. Yet there is no standard of pain, nor of men, by which you shall say this patient is a coward, and his outcry exaggerated. Men and women are variously organized in respect of resistance to pain, and their fortitude or their despair must be tested, not by their cries, but by the other features of their characters. What right have we to say that a man writhing in the pangs of a toothache is a great sufferer, while, in the same breath, we hint that a woman complaining of pain in the abdomen is hysterical. The pain is equally invisible, equally unmeasured in the two cases, and the degree of credit to be given to the complaints is to be gauged by other probabilities.

A neuralgic woman seems thus to be peculiarly unfortunate. However bitter and repeated may be her visceral neuralgias, she is either told she is hysterical, or that it is all uterus. In the first case, she is comparatively fortunate, for she is only slighted; in the second case, she is entangled in the net of the gynæcologist, who finds her uterus, like her nose, is a little on one side; or again, like that organ, is running a little, or it is as flabby as her biceps, so that the unhappy viscus is impaled upon a stem, or perched upon a prop, or is painted with carbolic acid every week in the year, except during the long vacation when the gynæcologist is grouse-shooting, or salmon-catching, or leading the fashion in the Upper Engadine. Her mind, thus fastened to a more or less nasty mystery, becomes newly apprehensive and physically introspective, and the morbid chains are riveted more strongly than ever. Arraign the uterus, and you fix in the woman the arrow of hypochondria, it may be for life.

Now, gentlemen, it is time we complete our reaction from this gynæcological tyranny, and that we of this College no longer permit ourselves to be snubbed by these brethren of ours, who calmly tell us, with their superior airs, that our use of such expressions as uterine neuralgia, irritable uterus, ovarian neuralgia, neurasthenia, and the like, comes of a shallow sciolism, and is grounded upon the emptiness of our knowledge of uterine diagnosis.

The spirit of meekness alone restrains me from throwing the same stone again, and accusing our gynæcological friends of ignorance of neuropathies, and of the neurotic diathesis. That no man limited by the bounds of human intelligence can have a fine knowledge of medicine, surgery, and obstetrics is true, is as true of obstetricians as of physicians, but every man can have, and must have, a good all round knowledge of a kind which will enable him to take the main bearings of any case which may come to him.

For my own part, no conventionalities arrest me when my opinion is asked by a sufferer. The speculum and the uterine sound were invented as much for my benefit as for other people, aud I feel it both my duty and good will to examine into every detail of a case, whether medical, surgical, or pelvic.

This done, I am able to judge under whose care a patient may best be placed, and the more I thus incidentally learn of surgery and gynæcology, the more gladly and intelligently I recognize the extensive and dexterous attainments of those of my colleagues who work in those departments, and who can deal with such cases far better than I can. But, I repeat, and repeat again, that the main lines of the diagnosis of any malady whatsoever should be within the province and the abilities of any medical man whatsoever. What should we think of a family practitioner who made no diagnosis of a case of acute pneumonia, because his work lay chiefly with mothers, because he had not a stethoscope, and because he intended to call in a physician. On these grounds, I say that any well educated physician who does his duty to his cases, who does not idly turn them over to specialists, and who is armed with proper instruments of research, should know, as well as another, the main bearings of all his cases, and should claim to be heard on the diagnosis, although he may not and cannot pretend to distinguish minor differences, nor to have complete mastery of all the more refined devices of modern therapeutics. We physicians have been a feeble folk in this, we have shrugged our shoulders and submitted to gynæcological taunts in a way that may be very modest, but in a way that betrays our trust and our art. If the gynæcologists pelt us with stories of long pain and sickness uncured by medical futilities, but rapidly

cured under uterine medication, we can mate their stories, and check them by double their number of cases received by the physician from the sofa, the manipulations and mental abasement of narrow uterine specialism. To underrate our debt to gynæcologists, to forget the great work they have done in the past half century, were as foolish as ungracious; but, like all great movements in special fields of inquiry, it must be subject to reaction, and its results must be checked by those which have been obtained by other methods and in other directions. The wisest and most disinterested of gynæcologists now know well how lamentable have been the exaggerations, how narrow the views, and how deceptive the data of many opinions which have passed current in their school, and they are ready to declare that if medicine is not wholly to reclaim a great part of the field occupied by them, its culture must at any rate be shared with the physician. The physician has been at least as much to blame, in that he has contemptuously thrown aside many cases of genuine malady and of genuine suffering as hysteria. Even hysteria is a complaint to be treated and relieved, but the central blunder has been the stupid confusion between the hysteric and the neurotic subject. On adding up the cases in my chamber note-book for 1883, I find that under the three heads of neuralgia, neurosis and neurasthenia, 151 new cases were entered in that one year. What a tale of misery does this limited experience of mine indicate! Add together all the patients of all the doctors in the West Riding alone and compute the manifold suffering. Yet, I do not hesitate to say, that in our vigorous northern people, hysteria is far from a like extension. On the contrary, if the word be used with due care, I would go so far as to say it is rare.

I remember but one case of hystero-epilepsy in the Leeds Infirmary in the last year or two, no cases of contracture, and of other hysterical affections but a few, and these often paraplegics, who relapse, and, returning twice or thrice to our care, swell the apparent numbers in our books. Take a hysterical person, man or woman, in its common and, so far, proper sense; take it to mean a person of feeble purpose, of limited reason, of foolish impulses, of wanton humors, of irregular or depraved appetites,

of indefinite and inconsistent complaints, seeing things as they are not, often fat and lazy, always selfish; or, to take it in less degree, one capricious, listless, wistful, attractive perhaps, yet having always the chief note of hysteria—selfishness and feebleness of purpose; and if such persons complain of globus, of palpitation, which is never perceived by the stethoscope, of sleeplessness of which the nurse has no record, of dyspepsia which does not lessen the labors of the cook, of pains which never flush the cheek; and, if such person have, or have had, anæsthesia, unreal epilepsy, unreal syncope, unreal palsy, unreal cramps, then set down such person as hysterical, but forget not, nevertheless, to cure her mind and body. Such a patient is, no doubt, a member, a degenerate member, of the neurotic family; but it is almost with indignation that I repudiate the application of her adjective to the nervous sufferer, whom we may call the neuralgic member of that group. Why, gentlemen, my neurotic patients, if I can indicate them by a name, are almost the best people in this wicked world. Rarely endowed with the capacity and endurance, and profounder imagination, of the greatest, they form a large number of those in the second rank who are the salt of society. Let us suppose that Mr. Galton had photographed 400 of these, inside and outside; the resulting ideal neurotic might be much as follows:

His entry into your room tells of him at once. He enters with a brisk step, and a quick observant eye. You see a slightly built, meager man, of sallow complexion, or, if colored, with the color painted high upon the cheek-bone; the cheeks and the temples are hollow, the temporal arteries being visible under the lean skin, which often shows tanned markings, deepened during attacks of pain; the hair is straight, fine, and sparse upon the scalp; the features are sharp, often prominent, the lips thin and the skin dry; with it may be some remnants of eczema about the ears or chin. The tongue is protruded and retired quickly, and is generally narrow and pointed; it is rarely indented, and its tip, even when the health is best, does not cease to be red. There is often a slight silvery coating upon the dorsum and mid-line. The bodily frame is lightly and often finely built, the bony fingers

and wrists and the visible sinews and radials betraying the absence of fat. Here and there, in later life, a knotty knuckle may tell of gouty parentage. The pulse, when most tranquil, usually ranges between 70 and 80, and accelerates on the least excitement. The clavicles and ribs, in like manner, are prominent, and the heart's apex may be seen to beat sharply before the eye. Its systole to the ear is likewise short and sharp, and the second sound very audible over a wide area. The limbs are small, but often very sinewy. Such persons are as active as birds, and the absence of fat in their muscles often gives to these, in states of health, the quality of hardness under the hand. Their conversation, again, is lively and voluble, often keen and brilliant, but impressionable rather than imaginative. Usually, such a patient does not readily come to you; he is brought, half reluctant, by his wife or a friend; he says, apologetically, he is an old dyspeptic, and you can do him no good. He has visited all the springs and half the doctors in Europe, and he lays a bundle of old prescriptions on your desk. Once agate, however, his story will be a long and minute one, but never maundering, wandering, nor whining. His companions will tell you that he is subject to great fluctuations of the animal spirits—gay, even fascinating, in society, brisk, orderly, and thorough in business, but at home dejected or fretful. He is a small eater, a light sleeper, and a worn worker. These persons are the heirs of every true neurosis, from insanity to toothache; and, on the whole, when we consider the infinite pertubations of intermarriage, it is surprising how true they run, or how clearly you may detect the neurotic strain in mixed descendants. Of their visceral neuroses, I shall have to speak hereafter, and would only say now that in both sexes of them migraine, stomach-ache, and windy colic, are frequent and eminent, and receive the name of dyspepsia; and in the women are added to these uterine and ovarian neuralgias and hyperæsthesias. To call these suffering women of the neurotic type hysterical is to confuse all the due acceptance of names, and, what is worse still, it is to confuse the real relation of things. The neurotic woman is sensitive, zealous, managing, self-forgetful, wearing herself for others; the hysteric, whether languid or impulsive, is purposeless, introspective, and selfish. In the one is

defect of endurance, but in the other defect of the higher gifts and dominion of mind.

Now, if we turn our eyes upon the flock of women who lie under the wand of the gynæcologist, we shall find it so largely composed of the neurotic and hysteric, that we may say in our haste the uterus has no substantial diseases ; that its affections are all neurotic, or so far reinforced by neurosis as to depend for their cure mainly upon neuropathic medicine. Herein we in our turn should be to blame. Many a woman, otherwise robust enough, and many a woman, whose weakness may lie not in her nervous system, suffers from uterine disorder, from painful uterine states, nay, even from distant sympathetic pains also, which come of mischief wholly local, or of mischief reinforced by diatheses other than the neurotic. Making, however, the utmost allowance for all these, I contend that a vast number, I will go further, and say a preponderating number, of such sufferers lie under the scourge of neurosis, and that their uterine and ovarian disorders are either wholly neurotic, or, as I have said, so reinforced by neurosis as to depend chiefly or wholly upon general medicine.

Let me take as an instance a young lady coming of a family in which great mental gifts had thrown into relief the many eccentricities and humours which accompany them ; a family, too, of which no household had been free from nervous disease. She possessed the gifts and the attractions of the neurotic diathesis, and labored under its defects. It is possible also that she was in some degree under the stress of what Anstie called the unconscious sexual impulse. She was restless, excitable, and suffering. Her pains were mostly pelvic and abdominal. She never put her feet to the ground, partly because it intensified her pain, partly because she had been forbidden to do so. She had lain on her back for months. Pessaries had been introduced, but, being intolerable to her, were withdrawn. Her periods were agonizingly painful for the first two days, and were profuse, and she had constant leucorrhœa. Her appetite was almost gone, her stomach queasy, her frame emaciated ; but she was unselfish and full of courage, and would have scorned the wiles and exacting whims of hysteria. Her womb had been incessantly under specular

and other examination for a year or two, and, like nearly all such patients, she had uterus on the brain. I found the vagina tender, and the womb exquisitely tender; its substance was soft, and its attachments lax. Its position, therefore, was somewhat backward and downward. Acute suffering was caused in the upper hypogastrium when the fundus of the uterus was pressed upon *per rectum*. The rectum was full of fæces. By the speculum, I noted that there was both uterine and vaginal catarrh, and that the os uteri was excoriated—in the state, that is, of the upper lip of a scrofulous and snivelling little boy.

My most difficult task was to win my patient over to the belief that her disease was not mainly uterine, but mainly neuralgic; this once accomplished, our progress, though slow, was sure. I declined to initiate any treatment whatever until she would get her feet to the ground, and thenceforth cautiously regain the use of her legs. This took three months. Meanwhile I declined to "cure the ulceration of the womb" for the twentieth time, but made her content with rectal and vaginal astringent douches, first hot and afterward cold. As soon as she could walk, we perched her upon horseback. She was treated with the phosphide and valerianate of zinc, with bromide of ammonium, iron, quinine, and like remedies, with occasional sedative suppositories. In six months I found the uterus more compact, the ligaments braced, and the os clean and sound; the leucorrhœa had ceased, and all the parts could be handled without pain. Menstruation was still painful, but less so than formerly, and there was some menorrhagia. She was mixing, however, in general society, could ride gently to hounds, had regained appetite and looks; and, although I then lost sight of her, I have every reason to suppose she is as well as she is ever likely to become.

Now, gentlemen, is not this case one which in their degrees could be multiplied a hundredfold from our case-books or our memories; and yet these are they which form a great part of the women who are caged up in London back drawing-rooms, and visited almost daily for uterine disease, their brave and active spirits broken under a false belief in the presence of a secret and overmastering local malady, and the best years of their lives honored only by a distressful victory over pain.

The case I have described was selected by me because it was not one of mere irritable uterus without apparent disorder. Irritable uterus is a genuine malady, in spite of the denial given to it in high places. It corresponds to the hyperæsthesia of the stomach, which is found in the same diathesis, and which often simulates ulcer of the stomach.

But I pass over all these as neurotic enough, and I assert that, in such neurotic subjects, uterine laxities, moderate displacements, and catarrhs, owe their continuance, and often their very initiation, to an atonic state of body, and to a special instability of nerve-endowment, which may show itself in local trophic changes and in perverted secretions. Such changes or such settlements of perverted action are often, no doubt, called to this spot or the other by some local deviation from the normal, as a consumption may take its beginning from some trivial and forgotten catarrh; but the essence of the malady is not there, and to try to cure such a malady by local means is as wise as to try to cure a syphilis by antiseptic dressing of its ulcers.

Such subsidiary means are often needed—often, indeed, necessary; but in cases like those under discussion should be used as little as possible, because of the tendency of such methods to arouse and perpetuate a morbid possession of mind in the woman. All this our more robust, more clear-sighted, and more upright gynæcologists know well enough; in the rest, the fault may lie rather with modern fashion than with themselves.

Looking only to the uterine organs, their reason bounded by the confines of the pelvis, they attempt to stem the tides of general and diathetic maladies with little Partington-mops of cotton-wool on the ends of little sticks. That many of the cases we have discussed need a judicious combination of local with general treatment, is true, but in most of them the patient and the doctor are fascinated by the local phenomena, while nature herself is performing on a far larger scale. If we are to cure disease, we must be able to fly with her and to run with her, as well as to creep with her. In my later chapters I shall recall the truth which should be ever before us—that the fundamental difficulty in all neurotics, not hysterics, is their nutrition. More fresh air, without expenditure of the slender store of strength, the permea-

tion of their starved tissues with the fat which they themselves so often loathe in their food—these two reforms accomplished, all their organs will take on a more generous and a more vigorous life, all their tissues will brace and cleanse themselves from a purer and richer fountain of blood, and force will be stored up and energy developed, wherein before was dilapidation and sterility. As a shrewd old Yorkshire doctor once said to me: "It's no use, my lad, putting the hands right upon the clock-face if you haven't cleaned the works."

Gentlemen, we are all one-sided; I speak to-day from my own one-sidedness, and my convictions are upon the side of cleaning and repairing the works. Sometimes, no doubt, when the general state of the health is restored, some local trouble set up originally by the constitutional state—be it gout, scrofula, or what not—smoulders on, forgotten, as it were, after the general malady is cured. For such local trouble diathetic treatment no longer avails; it must be wiped out by some local alterative. But, on the other hand, to contend daily with local troubles which daily are regenerated by some vicious habit of the whole system, is to roll up daily the shameless stone of Sisyphus.—*Brit. Med. Jour.*

Miscellaneous.

CHICAGO MEDICAL COLLEGE COMMENCEMENT.—The twenty-fifth annual Commencement exercises of the Medical Department of the Northwestern University, better known as the Chicago Medical College, were held in the Grand Opera House, on the afternoon of March 25, 1884. Rev. Joseph Cummins, President of the University, presided on the occasion, and conferred the degrees upon the graduating class, which numbered thirty-eight in regular course, one *ad eundem*, and one honorary. After the opening prayer and music, the Dean of the medical Faculty announced the certificates for the under-graduates, certificates for special work in the hospital and dispensary, and the award of

prizes. The prizes for the two best theses were taken by C. S. Bacon, of Wisconsin, and George A. Staples, of Iowa. The alumni prize, for the best average scholarship in all the branches of the three years' study, was taken by A. C. Helm, of Illinois; the Senn prize, for the best anatomical preparation, by T. H. Swayne, of Illinois; and the microscope prize, offered by W. H. Bullock, of Chicago, and J. Grunou, of New York, to the candidate for graduation who should sustain the best examination in the theory and practice of microscopy, open for competition to the graduating classes in all the colleges of Chicago, both literary and medical, by C. S. Bacon, of Wisconsin. The practical working of the long college sessions, the thorough grading of classes, and the annual examination of each class in its grade, instituted by this college, is well illustrated by the following remarks of the Dean of the medical Faculty, in presenting the present class of candidates for graduation to the President of the University:

"*Mr. President:*—The college class presented by the candidates for graduation before you, entered their first year numbering sixty-five.

"The effect of theoixtanima ensin the branches of medicine embraced in the first year course, was such as to convince fourteen of these that they had better seek some shorter and surer road to the principal object of their ambition, a diploma, and consequently the class in its second year numbered only fifty-one.

"The effect of the examinations in the studies of that year added to the first, produced the same convictions on ten additional members, consequently the class in its third and last year numbered forty-one.

"I regret to say that the result of the third year examinations has caused three (3) of these to be missing from the class as they stand before you to-day.

"These facts will justify me in assuring you that the 38 young men whom I present before you to-day as candidates for the degree of Doctor of Medicine, and for a formal admission into the ranks of one of the noblest and most responsible of professions, have been subjected to a patient, systematic, and thorough course of medical training in every department, from the elementary work

in the laboratories of anatomy, chemistry and histology, to the direct practical study of disease at the bedside of the sick in the hospitals and dispensaries. More than this, they had been well prepared for professional studies by a good general education. Seventeen of the 38 are graduates of literary colleges and universities of the highest standing in our country. The remaining 21 have given the medical Faculty full evidence of possessing a good academic education. As the representative of the Faculty of the medical department of the university over which you preside, I take pleasure in asking you to confer on each member of the class here presented the degree of Doctor of Medicine, feeling a strong assurance that by their attainments, their industry, and their personal integrity, they will prove an honor to their Alma Mater, and a blessing to the communities in which they may live."—*Journal of the American Medical Association.*

ILLINOIS STATE MEDICAL SOCIETY.

The thirty-fourth annual meeting of the Society will be held in Chicago, Methodist Church Block, cor. Clark and Washington Sts., beginning May 20, 1884, at 10 A. M.

OFFICERS FOR THE YEAR 1883–4.

President.—Edmund Andrews, Chicago.
First Vice-President.—D. S. Booth, Sparta.
Second Vice-President.—G. W. Nesbitt, Sycamore.
Treasurer.—Walter Hay, Chicago.
Permanent Secretary.—S. J. Jones, Chicago.
Assistant Secretary.—J. F. Todd, Chicago.
Members of Judicial Council.—One Year, C. Truesdale, Rock Island; C. Goodbrake, Clinton; A. K. Van Horn, Jerseyville. Two Years, E. Ingals, Chicago; F. B. Haller, Vandalia; Wm. Hill, Bloomington. Three Years, Robert Boal, Peoria; Herbert Judd, Galesburg; L. G. Thompson, Lacon.

STANDING COMMITTEES.

Practice of Medicine.—J. C. Frye, Peoria; J. W. Hensley, Yates City; N. S. Read, Chandlerville.

Surgery.—Roswell Park, Buffalo; David S. Booth, Sparta; J. D. Whiting, Petersburg.

Obstetrics.—S. K. Crawford, Monmouth; E. A. Ingersoll, Canton; C. DuHadway, Jerseyville.

Gynæcology.—W. S. Caldwell, Freeport; A. C. Corr, Carlinville; A. F. Rooney, Quincy.

Ophthalmology and Otology.—J. P. Johnson, Peoria; Robert Tilley, Chicago; P. H. Garretson, Macomb.

Drugs and Medicines.—B. F. Crummer, Warren; J. H. Robinson, Chicago; T. M. Collimore, Concord.

Necrology.—E. Ingals, Chicago; William Hill, Bloomington; W. West, Belleville.

SPECIAL COMMITTEES.

Oral Surgery.—J. V. Black, Jacksonville.
Tetanus—.C. Truesdale, Rock Island.
Vaccination.—M. F. Bassett, Quincy.
Diseases of Children.—J. P. Matthews, Carlinville.
Physiology.—A. Wetmore, Waterloo.

[Continued from last year.]

Committee on Legislation for the Insane—Walter Hay, Chicago, Chairman; E. P. Cook, Mendota; Wm. Hill, Bloomington.

The Diagnostic Peculiarities of Malignant Growths.—Christian Fenger, Chicago.

Analysis of a Certain Class of Remedies, Concerning which Physicians are not Positive as to their Therapeutic Value.—W. M. Ransom, Roscoe.

Simple Renal Catarrh.—I. N. Danforth, Chicago.

COMMITTEE OF ARRANGEMENTS.

D. W. Graham, Chairman; C. G. Smith; R. C. Hamill; H. A. Johnson; E. Ingals; J. S. Todd, *ex-officio*.

A full and interesting meeting is anticipated, and the Committee of Arrangements are completing plans for reduced railroad fares, a banquet, and other attentions.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE HOSPITAL SERVICE, JANUARY 1, 1884, TO MARCH 31, 1884.

Fessenden, C. S. D., Surgeon, to proceed to Cairo, Illinois, and Memphis, Tennessee, as inspector, March 5, 1884.

Purviance, George, Surgeon, granted leave of absence for thirty days, Feb. 16, 1884.

Smith, Henry, Surgeon, to rejoin his station at Norfolk, Virginia, March 7, 1884.

Irwin, Fairfax, Passed Assistant Surgeon, relieved from duty at Norfolk, Virginia, to assume charge of Cape Charles Quarantine Station, March 7, 1884.

Carmichael, D. A., Assistant Surgeon, to report to Surgeon Purviance for examination for promotion, March 5, 1884.

Armstrong, S. T., Assistant Surgeon, to report to Surgeon Fessenden for examination for promotion, March 5, 1884.

Bennet, P. A., Assistant Surgeon, leave of absence extended ten days, January 18, 1884.

Ames, R. P. M., Assistant Surgeon, detailed for temporary duty on relief boat—Ohio River flood sufferers, February 16 and March 1, 1884.

Devan, S. C., Assistant Surgeon, upon expiration of leave of absence, to proceed to St. Louis, Mo., for temporary duty, February 6, 1884.

Kalloch, P. C., Assistant Surgeon, to proceed to Charleston, S. C., for temporary duty, February 1, 1884.

Bevan, A. D., Assistant Surgeon, granted leave of absence for seven days, March 13, 1884.

Wasdin, Eugene, Assistant Surgeon, granted leave of absence for fifteen days, March 4, 1884.

Battle, K. P., Assistant Surgeon, to proceed to New York, N. Y., for temporary duty, February 4, 1884.

RESIGNATION.

Cook, H. B., Passed Assistant Surgeon, resignation accepted by the Secretary of the Treasury, to take effect February 5, 1884. January 31, 1884.

APPOINTMENT.

Battle, Kemp P., M.D., of North Carolina, having passed the examination required by the Regulations, was appointed an Assistant Surgeon by the Secretary of the Treasury, February 2, 1884.

PROMOTIONS.

Carmichael, D. A., Passed Assistant Surgeon, promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from March 1, 1884. March 18, 1884.

Armstrong, S. T., Passed Assistant Surgeon, promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from April 1, 1884. March 28, 1884.

THE

CHICAGO MEDICAL

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VOL. XLVIII.—JUNE, 1884.—No. 6.

Original Communications.

ARTICLE I.

DOCTORATE ADDRESS Delivered at the Commencement of the Woman's Medical College, by WM. H. BYFORD, A.M., M.D., President, on April 22, 1884.

Ladies and Gentlemen :—The Faculty of the Woman's Medical College have kindly requested me to represent them before this audience.

I feel flattered by this request, and regret that my ability for the discharge of such a duty is not as great as I could desire. I accept it, however, because I have something I want to say to the non-professional portion of this assembly, on the subject of woman's fitness for the practice of medicine, and the propriety of her doing so.

I admit that there is not much need of argument in favor of a demonstrated fact; but I am also aware that there yet remains much prejudice in the minds of many honest people against medical women.

The propriety and necessity of women entering the profession of medicine, and indeed, other avocations heretofore occupied by men, are but the results of changes in our social fabric which have been going on for a long time. The position of woman in

her relations to society, is not what it was a half century ago, and can never be restored to her. Many of the agencies that have brought this about, are still at work, and their future effects will be irresistible. Many of us remember the time when every woman could look forward to the possession of a home, and to a time when she could exercise those functions for which by nature she was intended, and in which she could enjoy the preëminent blessings of domestic life. Her training led up to those grandest of all duties, the moulding and education of her generation.

In her was centered, to a greater extent than any other being, the happiness and prosperity of mankind. Unfortunately, with the march of events, the conditions under which such a life was practicable, have been swept from society, and hundreds of thousands of women cannot aspire to domestic duties.

It is a curious fact, that much of this change has been brought about by the great advance made in modern civilization. Labor-saving machinery, the result of science applied to the every day affairs of life, does the spinning, weaving, sewing, knitting, washing, and a great many other kinds of work formerly done by women.

This, of course, relieves women of a great deal of drudgery, and in a certain sense improves the condition of those who can live without laboring for their own support, but it leaves others unable to earn a living in occupations recognized as belonging to them.

Then again, many of the duties devolving upon womankind are allotted to the opposite sex. The male cook, house servant, and laundryman, are too common to require mention, and scarcely less numerous are male milliners, and mantua-makers. It would be tedious to recite all the usurpations of the scientific workers of the sterner sex. I say, scientific workers, because even cooking and washing, as well as many other domestic processes, are done in accordance with chemical and mathematical principles.

I do not wish to be understood as complaining of the unquestionably great improvements of the times. They are no doubt, designed to, and will work out beneficent results for the race, but until society accommodates itself to the changes, we must expect some of its members to suffer on account of their unfav-

orable position in social life. We should not, perhaps, desire a restoration to women of all their former occupations, but should seek for them, in the new and better state of things, more profitable, if not more congenial avocations.

Another question relevant to the subject of the changes now going on in society, is matrimony. The order of things in time past, made the obligation to marry imperative, and the stigma "old maid" was a galling taunt to every sensitive woman. Even now, the most desirable thing for every good woman is to marry, and I am sure I will not be wide of truth in stating that almost, if not quite all women, look upon the undivided devotion of one good man as the main element of an earthly paradise. And they are right. But, in the very nature of things, many women cannot marry. A number of reasons will present themselves in support of this statement. There is a great numerical disparity of the sexes. The marriageable women of this country exceed the number of men who *might* enter the bonds of matrimony. Then there is a growing disposition among men not to marry. Why should this be? There are many good causes, when we look upon the subject from the standpoint of the social changes going on. Every American whose love of liberty depends very greatly upon his ability to stand square before society with every other American, has not the means to support himself and a wife in first-class style. His desire is, very naturally, that his wife should be as accomplished and beautiful as any other woman living. He must therefore support her and an establishment in accordance with his views, or he will not marry. Born and educated in society as it now is, who can blame him? The majority of women look for this kind of a man. Society, you know, demands this kind of respectability, or seclusion. While he lives in a hotel, or club-house, dresses well, and behaves himself with propriety, society receives him with open arms. If he marries, and cannot keep up appearances, it shuns him. Sometimes good, honest, affectionate men marry and take their wives to hotels or boarding houses, and spend all their earnings to keep up appearances; but too frequently, this artificial and strained mode of life leads to conjugal infelicity, instead of domestic happiness.

Should one of these men have the courage to marry and live

in the humble manner warranted by his income, his gilded surroundings often lead to discontent.

And again, how the male vagabonds in this land are multiplying, men whom no good woman can marry and maintain her self-respect! These things are a part of the great changes now transpiring in the social world.

These, and like circumstances, are so numerous as to compel women to look out for independent means of support, and they are showing themselves equal to the task. The doors of domestic life are closed against so many of them, that they would be reckless if they did not seek some occupation that would enable them to live honestly, respectably, and independently.

It is not my purpose or desire to advocate the political rights of woman, nor to express my opinion upon this subject, which all must see is becoming an important problem of the age, but I am here to say that it is the sacred duty of us all to promote every enterprise that gives her an equal chance for an honest independence. She deserves such equality, and society will not be vindicated in her almost revolutionary progress until that end is attained.

The medical education of women is one of the means calculated to promote that very desirable object. There are still lingering among us, some persons who object to female practitioners of medicine. They urge objections which are based upon unfounded sentiment, instead of good sense and logic. The foundation for valid objections has long since ceased to exist. Such objectors believe that this and kindred movements will have the effect of undermining that good old institution we call "home."

No man has more veneration for the sacred relations existing among members of a well-regulated home, than I have. No man would go farther to foster that more than human institution, with all its precious belongings, as it was, and now is, than I would. No man reveres the holy relationship of mother, the loving and warm-hearted wife, or the confiding, worshipping dependence of a daughter more than I do. But all this laudable sentimentality about home should not blind us to the fact that there are now, and in the future must remain thousands upon thousands of women to whom none of these relations can come.

There are many men who affect to believe that the study of medicine has a degrading influence upon the pure minds and hearts of the sex, and that the practice of that almost divine art places her outside the pale of propriety. Useful knowledge is always elevating to its possessor, and whatever her future destiny may become, woman is purer and wiser, because of a knowledge of the physical and mental attributes of human beings.

Regarding the honored positions of mother and wife, as I do, as the most elevated any good woman can occupy, I consider that only a very little lower is that of the woman to whom are entrusted the lives of the mother and her children.

But is woman capable of discharging the mighty obligations incumbent upon practitioners of medicine? Has she the physical strength, nerve, and endurance, and has she the brains? These are practical and not sentimental questions, questions that must be answered by an array of facts instead of imaginative theories.

In traveling through Belgium and Austria, I think I saw the first part of this interrogatory answered, in a very emphatic, if not gallant manner, where woman is compelled to try her strength with a donkey, by being hitched by his side to a heavy cart.

On the way from Brussels to Waterloo, on the military highway built by the despotic Emperor of France for the subjugation and maintenance of his authority over the people who have so degraded womankind, may be seen every few rods such a team as this, tugging and trudging along before a cart filled with manure to enrich the soil, upon which the two working together may raise vegetables, to be brought to market in the same manner.

In the Austrian capital I have seen women carrying large hods of brick and mortar on rickety ladders to the top of the tallest structures. They did this while a representative of the lords of creation stood around to direct aright the muscular energies of these stalwart females.

It is a well-known fact, that in many of the old countries in Europe the women do the most laborious portion of farm duties. These exhibitions of physical power and endurance cannot fail to impress the observer with a better opinion of the capabilities of

the sex to bear the toil and fatigues of the profession that tries men's muscle and nerve.

But a fact more to the point may be found in the habits of the pioneers of this country, and it is pertinent, because it is an experiment elucidating the endurance of woman in the very duties to which her professional education calls her. When this and the immediately neighboring States were the western frontier, sparsely settled, covered with marshes, prairies, and forests, swept by the coldest of winds in winter, and parched by the hot sun of summer, there was a class of women called midwives, whose avocation and responsibilities were of the most trying character. They traveled by day and night, through the wet and cold, in the unceasing demands of their calling, and maintained a physical condition equal to every occasion that might present itself. I know that many of them did more of this irregular and wearing business than usually falls to the lot of the popular practitioner of the city or country. Often they themselves were mothers of large families, and were full of domestic obligations.

Even now, in this city, I could point to women who are enduring the ordeal of a full practice in this specialty, with all its trials, better than the majority of men. Those whose experience has placed them in a position to know, will assure you that there is no branch in the medical profession so exacting in toil, self-denial, and responsibility as this, and yet it is the one which has always largely devolved upon women. Is it not absurd, then, in view of these facts, to say that woman has not the physical ability to practice medicine? That objection is a subterfuge under which to cover the prejudices of the objector, or if honestly entertained, it is for want of definite information upon the subject, and consequently, proves itself to be mere ignorant prejudice.

The question is not whether women, as a class, are as strong as men, but whether they possess the strength necessary to become efficient practitioners. In view of the facts of the past and the present, I can have no doubt they are.

But, has she the nerve and courage equal to the appalling emergencies which sometimes unexpectedly present themselves? Has she the daring and dash of a bold surgeon? is she capable of doing the right thing at the right time, with that calm self-pos-

session so necessary to carry her through great surgical operations? Let us see. What is surgical courage? Is it a natural gift possessed by a few favored ones? I am sure it is not. It is an acquisition to which the best of us attain through an elaborate process of training. It is one of the results of a thorough medical education. It does not come to the strongest of us except in that way. Is this not true in every vocation requiring courage? Green recruits are not the reliable support of an army. The veterans only are an unflinching resistance to the advance of a powerful foe. Let the soldier tell you whether he was not strongly inclined to conceal himself or fly from the enemy in his first battle. Even the veteran hero of Waterloo, once said that he never entered a battle without trepidation, and that he never exposed himself to danger except from a sense of duty, and that natural bravery did not enter into his composition. Yet he never was suspected of cowardice, nor was he a coward, but he had acquired the courage necessary for a great general, and capacity of becoming the conqueror of Napoleon, through military training.

Surgical courage, technically speaking, is not a congenital trait of character. No one knows this better than the veteran surgeon. Now, in reference to courage in our profession, every surgeon remembers the harrowing episodes of his early career; with what misgiving, apprehension, and trepidation, he approached the lying-in chamber, or grave surgical operation, and how exhausted after he had passed through any considerable difficulty in either situation. It takes a long time to completely overcome the solicitude of the surgeon who is preparing to do a great surgical operation, which may decide the fate of a fellow being. And in this respect, all are alike, all are more or less discomposed when first entering the practical part of professional life.

In the very nature of a medical education, there is discipline that gradually leads the new recruits up to the degree of courage necessary for action. The dry skeleton commences the drill. Its naked squalor, the ugly grin with which it greets you, not only its teeth, but every bone in its ghastly countenance express more impressively than actual words, the presence of

death. The very sight of it causes the uninitiated to recoil in breathless horror. The student soon learns to scan every part of it with the intensest interest, and familiarly, indeed almost lovingly to nurse it into the late hours of night, and when all its mysteries are mastered, it is laid aside for the cultivation of subjects a grade higher in ghastliness. These are found in the dissecting room. The feelings of every individual when first entering that place are simply indescribable. Nothing but the knowledge that it is the ante room to physiology and pathology,—the processes of life and death—could reconcile the student to return to the dreadful scenes there displayed with such ghastly reality. Yet that place becomes so attractive that one forgets all its horrors, in the sublime glimpses it affords of the workings of the Great Author of our being. And after a time, the timid woman will fondly gaze into this mirror of humanity, and regret when obliged to leave it for still further advances in the study of her glorious art. Indeed, so captivating and so necessary is the study of anatomy, that she will often recur to it, and stand absorbed in its revelations with a pleasure incomprehensible to those who have not passed through such experiences. This is an exhibition of professional courage that may well be regarded as a great step in her march towards victory over her natural timidity.

The autopsy now is an inspiration to her—it is an exhibition of the traces drawn by the hand of her grim enemy upon his victim, and teaches her the methods of his approaches and attacks upon the citadel of life. She is thus armed with the knowledge which will enable her to parry his thrusts, and baffle his deadly onslaughts upon our nature.

In the hospital she becomes familiar with the anatomy of the living, every conceivable form of bloody mutilation, and the expression of pain, suffering, and death. She participates in the ministrations of the hospital staff, aiding the surgeon, and sometimes performing amputations, the removal of tumors, and other operations, until she knows all the methods, and has acquired—what people call "hard-heartedness"—but which is surgical courage enough to look with calmness upon scenes which fill with terror her uninitiated sister. Amid these scenes in

which she is an actor, she acquires the strength of nerve, and the habit of composure, that enables her to do her duty in every trial with promptitude and precision.

That women are equal to all the emergencies of the most important surgical and obstetrical operations, we have ample proof in this city and elswhere. There are scores of women surgeons in this country who have repeatedly done the most daring and difficult surgical operations, and the number of individuals educated up to that point grows larger. I have many times witnessed the exhibition of this surgical capacity and coolness on the part of women in this city. I could point out to this audience women practitioners who do not hesitate to undertake, and who accomplish surgical achievements of which any man might be proud. I will venture to assert, what is generally known to the profession in Chicago, that one of our alumnæ left as brilliant a surgical record in Cook County Hospital as any young man who preceded her. And the young male interne who shall excel her in boldness and dexterity in that branch of the healing art, will some day win for himself position and renown.

Medical women have successfully embarked in the literature of the profession. Several of them have written books that are regarded very justly as eminently respectable authority on the subjects upon which they treat, and every month well-written papers from them adorn the pages of the medical journals of this country.

In the medical colleges devoted to the education of the sex, women are chosen for, and very acceptably discharge the duties of teachers and professors, and with a continuation of the progress they are now making, it will require but a few years to render these institutions as they ought to be — entirely independent of medical men for their corps of teachers.

As practitioners, the people of this city can judge for themselves. How many women are now enjoying the confidence of the people, and are engaged in lucrative professional practice, I will not undertake to say, but we all know of a score or more, and they are becoming more numerous every year. The prejudices which have been transmitted from one generation to another for a long time, are rapidly giving way under the new state of things. The intelligent observer who has been cognizant of the changes

which have been going forward for the last twenty years, can easily appreciate the causes which are dissipating this firmly-rooted prejudice against women.

Before women were admitted to the medical colleges, and permitted to enjoy the privileges these institutions afford them, the women who practiced medicine were ignorant, and in most instances, unscrupulous pretenders, and deserved the condemnation of the people and the profession. Those who were honest, and had the good of their patients at heart, were debarred from the opportunities of obtaining a thorough medical education. Their chances for knowledge were confined to the reading of a few antiquated books, and the occasional opportunities for observations they were so fortunate as to be blessed with. In addition to their entire absence of thorough teaching, many of them were of a very low type of womankind. To do justice even to this class of pretenders, however, it ought to be said that they had their professional prototypes in the opposite sex, and that scores of men practiced medicine who were equally ignorant and unscrupulous, for whom there is no valid excuse, as they had free access to the medical colleges at all times. Now, thanks to medical legislation, both of these classes of charlatans are driven from our profession, and both sexes enjoy equality in the opportunities to obtain a medical education. Women not only have the opportunities to study and become scientific practitioners, but the standard of the schools to which they are admitted is as high, and the requirements as rigid as in colleges graduating men. Their sex affords them no immunity from the same exacting examinations for the degree of Doctor of Medicine, and they do not expect or desire that it should. We find them bright, intelligent, and earnest students, and they pass examinations that would entitle them to the honors of any medical college in the country. This places them in the category of scientific physicians, and upon the same plane of standing with medical men.

The intelligent members of society are becoming aware of these changes in the circumstances under which women are educated, and consequently, the qualities of women practitioners. The result is, they appreciate them more, and are employing them with

more freedom, and giving them that implicit confidence to which every competent and faithful physician is entitled.

Now, having witnessed what they have done for themselves in a little over two decades of time, I think we can justly say that they have achieved an honorable beginning, and can reasonably predict for them a permanent and enviable position in the profession for all time to come.

TO THE CLASS OF GRADUATES.

How natural it is for us when we are graduated to look upon the knowledge imparted to us as our own, and think of it as the result of our own hard study. This would be a very great mistake for you to make. You have been studying three years, and have been successful in fixing in your minds a small modicum of professional knowledge. You have not made any of the discoveries of facts upon which that knowledge is based. Millions of the best men of all time have been for many centuries constantly engaged in analyzing, demonstrating, and arranging the facts and knowledge which have been imparted to you in the last three years. Imagine yourselves searching for the information necessary to fit you for the practice of medicine without the light thus afforded, and you will realize how much you owe to your predecessors, and how little credit is due you in the work of accumulation. The laborers of the past ages, who have thus faithfully and ardently worked to acquire knowledge, and those of the present time who are still pushing forward, surveying every field and path of science in which facts relevant to their own may be found, constitute the profession of medicine.

To this body of worthy workers you owe everything you have, all you are, and all you can become professionally.

I say this much to you now, to show you how devoid of reality is that sense of independence upon which the neophyte is apt to base his calculations for the future. While you go with this strong multitude who have through us honored you with a certificate of membership, you will be borne with it, and participate in its triumph. When you turn your back upon it, you will be left in the dark. When you turn your hands against it, you will be

crushed in the struggle. Motives of self-interest, as well as the more noble sentiment of gratitude, prompt you to be good and faithful members of that ancient and honored body. Somehow, more is expected of women than of men. While your critics accuse you of being the weaker sex, they are ungenerous enough to exact from you more strength of character than they do from men. They will tolerate no short-comings in you. This, quite as much as the fact that female physicians are still on probation, will put you on your good behavior. Knowing you as well as I do, I welcome the result with the full assurance of triumph. But professional strength is just as necessary for you as professional honor. That comes from much study. The old threadbare saying, "Once a student, always a student," expresses the only condition upon which you can hope to become useful and successful practitioners.

Those richly endowed old friends of yours, to which you have devoted so much attention, that marks and annotations may be found on every page, still possess treasures from which you can draw more knowledge than you have already extracted. At the bedside they will assist you to differentiate the intricacies of disease, to clear up the dark places in pathology, and to treat successfully all curable maladies. If you do not consult them, but trust to the uncertain memories of your student days, their valuable contents will fade from your minds. While the books that have served you thus far are still valuable to you as physicians, you will be obliged to add new ones to your library, and to these some one or two of the best medical journals, and all must be read and assimilated. These new books and journals, if properly studied, will keep you on the tide of progress, and acquaint you with what discoveries in all branches of the healing art are being made in any part of the world. Keep constantly in mind that knowledge will bring you reputation, that it will secure to you a competency for the present, a fund for the days when you are not able to work. It will give you a welcome to all grades of social life, but what is better than all these, it will be the means in your hands of doing good. Doing good is the final object of the profession. Without that object it could not, and ought not to exist, and I need not repeat to you what you

have already heard, and will again hear, that the good done by our profession cannot be measured by any finite idea of quantity or quality, but must be left to the award of an infinite hereafter.

To this profession you are under obligations to add something to the store of knowledge which is intended for your successors. As the child can never repay its parents for the love and care so lavishly bestowed, except to give in kind these bountiful blessings to his own offspring, so you cannot absolve your obligations to the profession, except by leaving behind you some new facts or processes of cure. This, too, is the only way to attain to professional immortality. One single imperishable fact will carry the impression you may make upon the world on down the stream of time, until science expires in the coming future dark ages of the world.

There is another view of your obligations to the profession. You know it is but a short time since your claims have been presented for recognition, and for some time difficulties await you at every turn. Now, however, a general welcome is extended to you. That recognition is both public and private. You are admitted to the State, district, county, and city medical societies, and are entitled to all the benefits, both scientific and social, of all these associations. I am rejoiced to tell you also, in this connection, that one of the members of the Faculty of the Woman's Medical College of Chicago can claim the distinguished honor of being the first woman admitted to that great institution, the "American Medical Association." In private practice, you will in every way receive the respect and deference of all medical practitioners. What is better even than all this favorable state of things, is that some of you are the honored wives of medical men, and some more of you are betrothed to medical men. There is probably nothing that in so distinguished a manner carries with it the idea of equality, as the matrimonial alliance. Now that you have passed the curriculum, and are entitled to the open secrets of the college, I am willing to say to you that it is, for the Faculty, a very pleasant thing to educate and prepare one of a couple who have plighted their vows of love to each other, while the man of her choice is attending some other of the excellent medical institutions of the city. We always expect to have the best graduate.

A valedictory address is usually a farewell address, in which we are supposed to indulge in lachrymose demonstrations of sorrow at parting. My address, however, is one of welcome, and I rejoice far more than I lament that you are going home to mingle with friends, who are much dearer to you than we are.

Hitherto I have lectured to you as students, who were dependent upon the Faculty of this college for instruction and advice. I now address you as doctors, as peers in titulary dignity, and in the name of the one hundred thousand members of the profession in the United States, I extend to you the right hand of fellowship.

I do this gladly, knowing you, as I do, to be worthy of the honorable association. The Woman's Medical College of Chicago sends you out among those of the profession to whom you are strangers, as its representatives. We do this gladly, knowing you will worthily represent us. We know that in each of you are united the modesty and purity of honored womanhood, to the varied and lofty erudition of Doctors in Medicine. We know that you possess the qualities that will make you ornaments to society, and skilled members of our fraternity. Again I bid you all a most cordial welcome.

ARTICLE II.

PARETIC DEMENTIA AND LIFE INSURANCE.* A Study of the Dwight Case.

By JAMES G. KIERNAN, M.D., Chicago.

The Dwight Case was a decidedly complex one, and what in my opinion, was the most important of its problems, was not at all considered in the decision which terminated it. Whether Col. Dwight did or did not commit suicide to enrich his family, seems to me to be a matter of subordinate importance. The reasoning adopted to prove that suicide is a sometimes sane act, was not at all suited to its purpose, and from a scientific standpoint, worthless. No alienist worthy of the name will claim that suicide *per se* is an evidence of insanity. Suicide in a con-

*Read before the New York Society of Medical Jurisprudence.

scientious Roman Catholic would be presumptive evidence of insanity; in a free-thinker it would be presumptive evidence of nothing. The individual is the proper means of comparison, not different races, as proposed by some solicitors of life insurance companies. Any act which is in full consonance with an individual's circumstances and education and surroundings, cannot *per se* be regarded as an insane or sane act; it has a negative value only. The issue of suicide raised in the Dwight case, and made the main issue, led to a waste of time and glorified "experts" who were hitherto unknown. As gleaned from very conflicting evidence, the facts of the case are as follows: Col. Dwight, a man of prudent habits, suddenly became addicted to extravagant speculations, evidently engendered by the existence of stupid delusions of grandeur. He, at the same time, presented evidence of organic brain disease. These speculations had almost reduced him to bankruptcy, when he suddenly insured his life for $300,000 in various life insurance companies, dying, after one premium had been paid, his friends claimed, from the effects of a congestive chill conjoined with an overdose of morphine. The companies claimed that the Colonel committed suicide by strangulation. On autopsy, old and recent pachymeningitis with adhesions to the surface of the brain were found. The abdominal organs presented evidences of having been the seat of some malarial disease. There was noticed on the neck a peculiar mark which resembled that of a rope, but might have been produced by a tight necktie. To the alienist, the history above given points to the existence of paretic dementia at a period prior to the time the Colonel first entered into these wild speculations. Under such circumstances the question naturally arises, whether policies of insurance would have been secured by a paretic dement.

What is paretic dementia? It is a very well marked mental affection, easily diagnosed by a trained observer, but readily escaping the notice of laymen and the average untrained physician.

Two ex-commission merchants entered into a partnership involving several million dollars. A gambler won millions from his fellow-patients, and based his delusions on theirs. One patient,

if corrected about his delusions, would call on a mysterious double for confirmation, and then answer in the capacity of this double himself. The patient, while given to extravagant ideas of wealth, may be able to give true accounts of his pecuniary circumstances if kept to the point by leading questions.

The paretic dement is very apt to accept plans and schemes which look alluring; he is only able to see it from this standpoint, and everything which tends in any way to exalt his importance is seized upon by him. An apt illustration, and one which bears upon the subject under discussion, is the following case reported by Legrand du Saulle.* A physician well known in science, had had for more than nine years an insurance of $20,000 on his life. He suddenly gave unequivocal evidences of mental impairment, went and came rapidly, and wrote and spoke a great deal. He had an exaggerated opinion of his labors, vaunted his success in practice, and boasted of his professional ability. In one of his walks he accidentally met the president of the company in which his life was insured. After a long conversation, Dr. Blank said that his life was assured for an insignificant sum, and that he had resolved to increase the amount to $100,000. He was referred to the proper authorities, who consented. The policy was prepared, and all that was needed to complete the assurance was a receipt for the same. The agent, who was ready to deliver the policy on the signature of the receipt, suddenly noticed, just as the doctor was about to sign this, that the latter talked rather freely and loudly. Suspecting intoxication, he put off the delivery of the policy until Dr. Blank should become sober, claiming to have forgotten some important formality. The following day the physician was sent to an hospital for the insane, where he died in six months from paretic dementia. The company paid the $20,000 to his widow, and esteemed itself happy that it did not have to pay the $100,000 for which the husband had desired, in a fit of pathological temerity, to assure his life.

The appetite, as a rule, is good, even excellent, and the sudden appeasement of a seemingly good appetite in lunatics is sometimes, as has been shown by Dr. Workman, of value as a diag-

Gazette des Hopitaux, Sept. 23, 1883.

nostic hint. The remissions are of interest from the medico-legal and diagnostic standpoint. They furnish one of the numerous stumbling blocks for the dilettante alienists who infest our courts. Sauze describes them as of three kinds: Those in which there is remission of the mental and physical symptoms simultaneously; those in which there is remission of the mental symptoms alone; finally, those in which there is remission of the motor symptoms alone. Mickle found the first two types common, but the third he had never observed. As has been pointed out by Baillays, there is, as a rule, an amelioration of the mental symptoms, the motor symptoms persisting. This has also been the experience of Bayle, Ferrus and Rodriguez. Lubimoff and Doutrebente have claimed that the remissions are sometimes complete restorations to health. Spitzka, Westphal, Mickle and myself have seen but very rarely such complete remissions. Doutrebente and myself have found the speech trouble least affected by the remission. Lunier has reported a case in which seven remissions occurred. The case was of twenty-seven years' duration. The disease has a very bad prognosis, both as to life and recovery, as it causes death in, as a rule, from three to four years. The gross lesions usually found on autopsy are those already described in the Dwight case.

Enough has already been detailed to illustrate the predominant characteristics of this disease. It will be obvious that the intellectual powers of a paretic dement are such as would make him an easy victim of the blandishments of any "sharp" insurance agent who would believe him, from his apparently excellent health, to be a good risk. Once started in the life insurance direction, the paretic dement would keep on, like Legrand du Saulle's patient, increasing the insurance on the life of the valuable citizen he believes himself to be, since the paretic has a tendency to adopt and extend ideas derived from others, as is shown by the case cited by Spitzka, of the paretic dement who, saved by his wife from a paretic suicide, proposed to erect a monument to her for saving the life of so valuable a citizen. It is curious how often this psychosis escapes observation by the non-alienist physician and laymen, when compared with the ease with which it is diagnosed by even asylum attendants familiar with it. The two cases

(already cited) as occurring in New York State were two cashiers of banks who had been paretic dements for at least two years, and had nearly brought the bank to a condition of insolvency by simple lack of attention to business; their mental condition had not been at all suspected by their business associates. In Chicago, a saloon-keeper with a paretic delusion of having inherited $2,000,000, was interviewed by the reporters of every paper in the city, by none of whom was his mental condition suspected until his friends took measures to have him placed under treatment in the County Hospital for the Insane. There is, therefore, nothing antagonistic to the existence of paretic dementia in Col. Dwight, in the fact that he insured his life for the amount stated, and that his mental condition escaped observation from the business men of the companies. It may, however, be urged that the medical officers of the companies would detect the psychosis. He who knows how these medical officers are chosen—either from relatives, connections of officials of the companies, or by agents,* who tell the physician that "he must not be too strict;" or for political reasons to influence State legislatures, from medical politicians* who indulge in "graveyard insurance," in which they get caught sometimes, but not as a rule, will scoff at the idea that men like these, who neither know nor care to learn anything of psychiatria, could be of value in the detection of insanity. Even in France, where the physicians are supposed to be better trained than the graduates of our diploma factories, the one case cited shows the value of non-alienist medical examination, and the same point is still more strongly illustrated by another case cited by Legrand du Saulle: Two brothers presented themselves at the office of a French alienist. The elder entered the office first, and asked the alienist to examine with care the patient brought him. "There seems to be nothing the matter with my brother," said he, "but he is no longer the same." The physician, after a long examination, said, "Your brother is in the initial stages of paretic dementia." Explanations were then given, and the prophecy made that the patient would die in three or four years. The following day an assurance of $20,000 was

* Actual occurrences in Chicago.

placed on the life of the patient. Three years after, the brother pocketed this amount.

The first stage is usually ushered in by emotional excitement, generally of an expansive type. The patient is hilarious, perhaps even boisterous. He is likely to make extravagant purchases or lavish gifts. His memory is not unlikely to be capriciously defective. Carelessness in attire may suddenly present itself. On the other hand, the patient may suddenly become fastidious about the use of flashy attire. A patient in Chicago displayed this at his trial for insanity to such an extent as to be called the insane "dude."

The patient, as in cases observed by Hammond, Lélut, Baillarger, Parot, Billod, Brierre de Boismont, A. Sauze, Maudsley, Burman, Fabre, Darde. Mickle, and Voisin, may commit theft in a stupid manner. I have observed cases in which theft was the first obvious evidence of the patient's insanity, which was not recognized until he had been tried and condemned to the penitentiary. In a case which recently occurred in New York, a man who was first arrested for stealing flowers in open day and in presence of a large crowd, was upon examination found to be suffering from the initial stage of paretic dementia. Le Grand du Saulle has been called on to determine the mental status of many paretic dements the first observed symptom of whose disease was theft. If the patient be an officer in monetary trust, errors in his accounts leading to suspicions of embezzlement may occur. In most cases, as in two recently reported from New York, this is due to forgetfulness. Le Grand du Saulle reports the case of a cashier who suddenly became addicted to visiting places of ill-repute, neglected his accounts and embezzled money, displaying soon after evidences of the third stage of the disease.

Eroticism, varying from tendencies to form improper marriages up to the wildest lasciviousness, as in cases reported by Guislain, may make its appearance. Moreau (de Tours) says that the sentiment of love in its ideal sense is very often the first symptom of this affection; the genital excitement appearing later. The first tendency is often noticed in hitherto fanatically orthodox Jews who suddenly contract marriages with Christians. In a case cited by Le Grand du Saulle, a man suddenly married a

prostitute and legitimized, by acknowledgment according to the French law, her two children, dying soon after in an asylum. This sexual excitement may manifest itself in indecent exposure of person. I have observed the case of a hitherto respectable physician who suddenly indecently exposed his person; fined for this he immediately exposed it on leaving the court-room, and the fine was doubled, but he again repeated the offense. In consequence of this he was committed to prison, and on his release came to Chicago, where he was found to be a paretic dement, dying in the Cook County Hospital for the Insane.

Wild speculations may be suddenly entered into. In a case cited by Sankey, a paretic dement whose mental condition had been hitherto unsuspected suddenly rose in a meeting of stockholders of a concern on the point of bankruptcy and offered to purchase all the stock. In a case cited by Spitzka, a hair-dresser bought up all he could find of a certain shade of gray hair. The delusions which may occur at this time, as a rule, are expansive in character. The patient is immensely wealthy, rich or strong. One of my patients, who was a little less than five feet high, claimed an altitude of ten thousand feet and a corresponding breadth. He was placed next a paretic slightly taller, and on being asked if the latter was not taller than he, responded that he was, but replied in answer to the question how tall he (the first patient) was, "ten thousand feet." The patient, who claims to be King Brian Boru, will answer to the sobriquet of Michael Mahoney, and give the latter as his name in answer to a question to that effect. One of my patients who had been a merchant made a list of his property consisting of patents, among which was a receipt for clam chowder, this he valued at a billion, and the other thirty-three patents for watches and railroads at one hundred millions. One of Hammond's patients owned all the trout streams in the country. The patient confuses the day dream with the actual. The delusions shift and vary. The man who is worth $1,000,000 to-day is worth fifty in ten minutes more. If contradicted, his allusions become exaggerated. The paretic dements, unlike the majority of the other insane, do not recognize the insanity of their co-invalids. In fact, one paretic dement often accepts another's delusions as a basis for his own. One

paretic dement in the New York City Asylum for the insane was going to secure an immense increase of capital by marrying his daughter to a fellow paretic dement.

In Germany a medical officer of a railway corporation stated the symptoms of paretic dementia, presented by a 43 year old man, were only changes due to old age.

Hanot* in a recent paper calls attention to the dangers life insurance companies are exposed to from this class of patients, who, as already stated, escape the diagnostic ability of the average insurance company physician, and it will be obvious that the average untrained physician is worthless in the detection of this psychosis. With all these facts before him, the alienist will not hesitate to say that Col. Dwight was a paretic dement when he effected the insurance on his life. Whether he committed suicide or not, is foreign to the real question in the case. Is an assurance effected on the life of the paretic dement by himself or his relatives, in good faith, binding on the company making such assurance? The Supreme Court of Iowa* has decided that persons of unsound mind are to be held bound by an executed contract or conveyance when the transaction is fair and reasonable, and in the ordinary course of business, and where the mental condition of the party is unknown to the second part, and the parties cannot be placed in *statu quo*. The converse of this necessarily follows: A paretic dement cannot be guilty of fraud, for fraud implies a knowledge of the true state of things, and of this knowledge the paretic dement is destitute. Col. Dwight effected an assurance on his life because he was a paretic dement. If contracts with the insane under the circumstances mentioned by the Iowa decision are binding, then his policies were binding on the companies. If the policies were binding on the companies, no suicide by him could vitiate them. It may be admitted that even assuming the truth of all the circumstances, it was an injustice to burden the companies with the results of the actions of an insane man. With the consequences of a law a judge has nothing to do; his duty is to declare what that law is, and the same holds good of a scientist and scientific truth.

**Northwestern Reporter*, June 18, 1881.

*Annales d, Hygiene, 1883.

The companies were themselves to blame for accepting such a risk, a risk offered by the would-be policy holder in good faith. It may seem hard on the companies, but it would also be hard on the family of other paretic dements if they should, in consequence of the precedent set in this case, be deprived of the provision made for them. The life insurance companies use all means to detect fraud and to ascertain the value of risks. If such means prove insufficient, not through fraud of the policy holder, but through the incapacity of the companies' agents, the company should be held responsible. For these reasons, the present writer believes that the decision in the Dwight case was fully warranted, even supposing the deceased committed suicide. Another aspect of the case presents itself: Supposing Col. Dwight, a paretic dement, insured his life and then, with a paretic idea of smartness, committed suicide to compel the company to suffer for some imagined affront, or with the vague idea of making money for his friends, would his act vitiate his policy? Under the Iowa decision the writer believes not, but would not like to express an opinion of the abstract justice of such a decision; legally he believes the policy could not be declared void; however seemingly unjust its non-voidance, or rather the full requirements of all its provisions under the circumstances would be. The question simply resolves itself into this: Can a contract, which, *per se*, involves an element of risk, all means of diminishing which risk are supposed to be taken by one of the persons making the contract, be regarded as void because, without fraud on the part of the other person making the contract, the risk proves greater than was anticipated. Life assurance contracts are based on the theory that the company ascertain the exact condition as regar ds disease. If the assured have an ordinary physical disease, unknown to himself and the examiner, and die from such disease, the company is held bound to pay the amount of the policy. It would seem that the same rule should hold good in the case of a paretic dement. The present paper has been written simply to raise this question for discussion. The writer believes that the policy and stockholders suffered unjustly in the Dwight case from the "inventive stupidity of agents and medical officers, and from the legal advisers making a fight on the question of fraud,

where one should have been made on the question of contracts with the insane."

ARTICLE III.

CLINICAL AND PATHOLOGICAL REPORTS OF CASES OF INSANITY. By S. V. CLEVENGER, M.D., Special Pathologist Cook County Insane Asylum.

Male case No. 317. Paretic Dementia. P. M., age 47; admitted Nov. 7, 1883; American; married; salesman. Delusions of grandeur; President of U. S., Son of God; hallucinations of sight; noisy; errabund; mother was "insane a short time," and died of heart-disease in 1878; father of "ulcer of leg." When 20 years old patient was in Indianapolis Asylum three months. He had been drinking hard previous to this. Last attack came on while hard at work; was furious; broke windows, etc. A large dose of fluid extract conium gave him a twenty-four hour sleep, which he needed badly, having been furibund night and day for some weeks. He awoke refreshed, and remained apparently in full possession of his faculties, quiet, gentlemanly, and free from delusions until the last of December, when remission gave place to excitement. The Trinity, Masonry and Politics afford him special topics. Is rapidly deteriorating. There is a characteristic proclivity in paretics to emphasize a great deal in the documents they are fond of writing. Here is a specimen: "I shall start out on a *Mission of Peace* taking for mottoes *Truth*, *Justice*, *Liberty*, and endeavor with all the *earnest vigor of mind and body* to *Preach the* GOSPEL of FREEDOM *throughout* the *U. S.* ONE GOD OVER and AROUND and IN ALL (*except a few devils*). I believe WOMAN an ANGEL of MERCY. But I forget these are but the '*illusions*' of a maniac (?) '*Insane* (?) from overworked brain.' My employers and Dr. Spray say this, on but limited knowledge of the *man* they are now *torturing* by *confining* with sons of GOD *de-*

mented," and so on through quires of letters and proclamations he formerly wrote. Lately he is too demented to attempt writing much.

Male case No. 301. Paretic Dementia. Frank E., age 45; admitted Oct. 4, 1883; German; married; clerk. Errabund; verbigerative. Was about to sue city for thousands of dollars damages. Said his wife was crazy; tried to have her arrested. Talked to angels who told him he would be rich (evidences of hallucinations of sight and hearing). Imagined himself worth millions of dollars; said he felt well; general anæsthesia decided; blind in one eye; varicosities in popliteal space; general tremor, with ataxic gait; drank hard formerly, but not lately. Had suffered from sun-stroke and head injury—bayonet-cut in head during the war, after which delirious two months; mornings usually more manageable; violent toward night, when delusions related to old army matters; thinks he is a prisoner of war surrounded by rebels. Sings vociferously "Battle Cry of Freedom" and other old patriotic songs. Grew rapidly worse; filthy, and furor occurred oftener. Died Dec. 18, 1883. Autopsy next day; skull thin and elastic abnormally; hæmatoma auris left ear. Blood in brain light-colored. No adhesions except intermeningeal along superior longitudinal sinus where membrane showed spots of extravasation. Vascular stasis apex right temporal lobe and basilar aspect, also in middle of left temporal lobe at base. Extravasations upper posterior aspect left cerebellum about a month old, forming bloody cyst in arachnoid half an inch in circumference. General vascular engorgement entire upper surface of cerebrum; puncta vasculosa numerous; ventricular endyma normal; cerebellum weight 6 ozs.; isthmus $1\frac{1}{4}$ oz.; left cerebrum 17 ozs.; right cerebrum $17\frac{3}{4}$ ozs. Total, 42 ounces.

Female case No. 165. Recurrent Mania. Ella A., age 43; Norwegian; widow; admitted May 5, 1882. Delusions of persecution, with optic and auditory hallucinations; furor every two or three months; father died of scarlatina at age of 33; mother died aged 72 years. When her menses began she was insane six months. A remission of five years followed, during which she married a drunkard who abused and neglected her. After birth of son, who is now 20 years of age, became insane again and was

sent to Christiania Asylum, where she remained as a patient nine and a half years, and after remission of insanity was employed as an attendant. She and her son embarked for America in 1881, and the excitement of travel brought on third attack. In August, 1883, had an attack of typhoid fever in asylum, from which she convalesced by Dec. 15, 1883. During the height of this disease her furor appeared in a modified form, and the attendants could recognize the old incoherent ravings, but her weakness prevented their full expression. Jan. 1, 1884, noisy, destructive, singing, the past month; growing quieter till Feb. 2, 1884, when another outbreak of destructive fury appeared, but grew better daily, and is by the last of March quite rational, with a slight tinge of depression. She is very industrious during remissions, during which she talks rationally and realizes her condition. Is very fond of some of the ladies in the house, whom she recognizes and obeys, even in her greatest furor. May 3, 1884, is just recovering from a furibund attack.

Female case No. 168. Melancholia. Julia M., age 35; admitted May 17, 1882; Irish; married. Talks quietly but constantly on religious subjects to imaginary persons. Had been previously in poor health from nursing large child 10 months old. Parents died in middle life. Dec., 1883, improving rapidly; talks rationally; discharged recovered May 8, 1884.

Male case No. 97. Chronic Alcoholic Insanity. Martin H., age 40; admitted Feb. 18, 1882; Irish; married; night watchman; suicidal; delusions of persecution; says people tried to kill him, so he would kill himself, and save them the trouble; shot himself in breast; improved for some weeks after; sleeps restlessly; has large lupus erythematosus on nose, originated November, 1883; right malar region to left malar; ectropium induced by it in right eye; insanity accelerated by burglars having entered a store he watched. An ointment of hydrargyric nitrate, applied in March, 1884, rapidly changed the appearance of the lupus for the better. Erysipelas followed, abating in April.

Male case No. 331. Katatonia. R. H., age 24; admitted Dec. 13, 1883. American-German; single; salesman; had been gradually growing annoying, errabund, and eccentric for years, appearing to tend toward hebephrenia; committed many

improprieties; last summer much worse, and drank hard. Jan. 9, 1884, hysteroidal convulsions followed stagy behavior; then began cataleptoidal stage, during which his pulse was feeble; temperature subnormal; lay abed with eyes rolled up, but semi-conscious; winks, and has waxy mobility. Feb. 4, more difficult to rouse; some oozing of saliva from corners of mouth. Feb. 7, gradually emerged from stupor, and broke a window; maniacal stage began Feb. 8; cannot be kept in bed; sleepless. Feb. 14, quieter; remains abed; eats and sleeps well. Feb. 16, still violent; strikes patients. Feb. 18, quieter, Feb. 20, emaciated; stupid; talks incoherently; noisy at night. Feb. 25, fever began. March 3, quarrelsome; sleeps well, and is growing fat (of bad prognosis). March 15, attempted to strike superintendent, and uses vile language. Excitement gradually merging into sullen melancholia by May, 1884.

Male case No. 332. Primary Confusional Insanity. Wm. I. M., age 25; admitted Dec. 20, 1883; American; single; salesman. In Sept., 1880, was in Oakland, California, Asylum for awhile after a spree. Upon this occasion exhibited peculiarities of primary confusional insanity rather than those of acute alcoholic, although the cause was a protracted debauch. Restless; incoherent; talked of betting on the white horse; would repeat questions asked him; talked of headache occasionally, and rambled something as follows: "White horse; there he is; didn't get there; get up; hello; yesterday; bet your life; where did he go; he has a bad eye; look out; let's take a drink." Jan. 7, recovered his mind suddenly. The last he remembers is being in the Union Depot, and when he became sane thought he was still there, and began to wonder at people sitting around with hats off and some without coats. The time he was insane is completely blotted from his memory. Sent to his father in Iowa in custody of friends Feb. 4, 1884.

Male case No. 348. Melancholia. M. T., age 29; admitted Jan. 31, 1884. Italian; single; statuary; delusions of persecution; suicidal; had been working in terra cotta factory exposed to great heat. In the same room here with him was male case No. 123, from whom he soon imbibed the notion that he too was to be hanged, affording the *folie a deux*, or communicated

delusion, to which French alienists first called attention. This sometimes runs through a family. In 1879, three insane sisters agreed to hang themselves, having identical delusions of persecution, and two of them succeeded in committing suicide at their residence on Langley avenue near 39th street, in Chicago. There was an undoubted teratological defect in these sisters. *Folie a deux* is not uncommon; nearly every asylum affords one or more cases.

Female case No. 180. Melancholia. Kate G., age 25; Irish; domestic; married; suicidal; June 3, 1883, escaped vigilance, and sprang through elevator door, falling four stories, comminuting left tibia four inches and dislocating both ankles. Dec. 31, 1883; confined to bed; recovering from injuries slowly; talks rationally, except in persisting in her suicidal desires; says it is only a question of time when she will succeed in killing herself.

Female case No. 181. Hebephrenia. Theresa S., age 20; German; domestic; single. Noisy, destructive, untidy; laughs sillily at times, incoherent; said to have become insane when menses stopped. Under treatment the flow was reëstablished, but no improvement in mind occurred.

Female case No. 182. Mania. Ann D., age 40; Canadian; seamstress. Admitted July 27, 1882. Fancies that she is wealthy, and that her sister cheats her. Given to lying about everyone. Delusions of persecution. Verbigerative, incoherent, harmless; scolds; not destructive; lazy, but tidy. Father died through accident when aged 60; mother failed in health after climacteric, and died aged 58. Patient's menses stopped three years before admission, and she began to be suspicious and melancholy, followed by persecutory delusions and fear of poisoning.

Female case No. 176. Epileptic insanity. Nellie McC., age 30; American; married. Admitted June 29, 1882. Between paroxysms works in sewing room. What is known as the psychic equivalent appears in her case, for example, she often has furor lasting two days and nights, during which she fights. Dec. 30, 1883, fell to floor; mouth twisted to one side the only convulsive movements noticeable; became silly afterwards for a few hours, but went to work as usual, and mind cleared up till Feb. 7, 1884,

when an outbreak of fury occurred. The furor taking the place of the epilepsy constitutes the equivalence, or occasional larvated form of that disease. She has four children, the youngest born in 1880. Husband first became aware of her insanity when, one morning, he was awakened by her beating him in the face with a slipper. She is wholly unconscious of these acts, and insists upon there being a mistake. Her demeanor between attacks is quite gentle. Naturally industrious.

Female case No. 170. Melancholia. Ida L., age 32; German Jewess; single. Always apprehensive that something terrible is about to occur. In 1866 was in Hartford, Conn., asylum two years; 1870 two years more in same asylum. Her sister committed suicide a year ago over a love affair. When Ida's insanity re-appeared she tried to drown an infant sister in a tub, explaining it was better they should all die. Says she cannot understand how any one could wish to live. Talks rationally, and has ladylike manners. Talks and sings in her sleep so loudly she has to be often awakened by night watch. Feb. 8, 1884, transferred to private asylum.

Female case No. 169. Mania. Paulina H., age 34; Swede; married. Hallucinations of hearing; thinks the sun and stars dictate to her; quiet usually, and talks coherently; has been neuralgic; flushes easily if spoken to suddenly. Opium and alcohol addiction alleged causes of her insanity.

Female case No. 166. Mania. Annie M., age 38; Irish; single; admitted May 11, 1882. Seven years insane; hallucinations of sight; sees dead relatives; quiet; talks on religious subjects incoherently if addressed; furor about every third month, when she throws things about, but quiets quickly. Amenorrhœa, costiveness, and dysmenorrhœa. Father died of cholera, and mother of some form of heart-disease. Patient was always self-willed. A cousin was insane after childbirth, and recovered after a barn adjoining house had burned. Annie has suffered from painful menstruation since 18 years of age, when catamenia began.

Female case No. 105. Mania. T. P., age 33; German; married; admitted Jan. 28, 1880. Frequent furor, lately somewhat more peaceable; extremely jealous of her husband; accuses

nearly every female of trying to take him from her; was weakly on admission, but health improved later; has dysmenorrhœa and scanty menses. Sister in Jacksonville asylum incurable, exciting cause in that case alleged to be death of children.

Female case No. 103. Terminal Dementia. Florence B., age 27; American; married; admitted Sept. 17, 1879. Usually sits bent forward, with head resting in right hand and eyes closed, occasionally starts up with incoherent exclamation. At the entertainments given in the asylum, she is noticeable as an excellent dancer, always looks neat, but this is more owing to attendants' than patient's care. Before and after menses, has monthly furor, during which she is stubborn and fights, but not noisy. Insanity said to be hereditary. She had six children in seven years, with other unusual domestic trouble .

Some Continental and English asylums would classify this case among chronic puerperal, but Krafft-Ebing has indicated the inappropriateness of so doing. Puerperal cases either recover or pass to secondary confusional, and then terminal dementia, as do the other psychoses.

Female case No. 88. Secondary Confusional Insanity. Julia H., age 46; Irish; married; admitted Oct. 10, 1870. Noisy, constantly prays, sings, and blesses everyone; sometimes belligerent. Her mother was confined after a fright at seventh month of gestation when Julia was born. General health, never very good. She is the mother of nine children, one of whom suffers from coxalgia; since youngest child was born began to "act strangely," constantly going to church and remaining till expelled; depressing delusions then began; attempted suicide by strangulation. Says that drunkards are possessed by the devil, which is about the only fixed idea to which she clings.

Female case No. 52. Agnes S., age 51; Bohemian; married; admitted March 30, 1876; early history not obtained; was insomnolent, with occasional attacks of dizziness and slight frenzy; usually very pleasant and rational; pulsation of left carotid artery visible from twenty feet away; cervical vessels generally dilated; suffered intensely toward close of her life; she died at midnight of August 12, 1883. Autopsy next day revealed liver enlarged

and congested; lungs emphysematous and melanotic. Hypertrophied heart measured 14 inches in circumference at auriculo-ventricular junction, 7 inches from apex to base; outer part fatty; weight with 2 inches of aorta, 24 ounces; aorta full of calcareous plates; arterial atheroma general.

Her physical condition rendered hospital treatment necessary, but no especial psychosis need be erected to fit her case, beyond recognizing the occasional delirium.

Female case No. 30. Secondary Confusional Insanity. Jeanette W., age 24; American; actress; single; admitted March 8, 1873; went by stage name of Capitola Delzell for some years until real name ascertained; she is over usual female height, with a stately figure, and evidently was a beautiful woman. During the day she engages in light housework, has little to say to anyone, is trusted to go about the building, attends to what she is directed to do quite well, but her ideas are otherwise foggy, and memory impaired. She can communicate her desires readily enough in short sentences, but from the blank stare of her eyes and occasional mutterings and incoherent addresses to invisibles, she is doubtless hallucinated. Rather reticent by day, but about two nights every week she is furious, swears, scolds and hammers on her room door, declaring that some one tries to break into her room and that her side is cut open.

Male case No. 20. Secondary Confusional Insanity. Charles E., age 27; admitted Jan. 11, 1873; American; printer; Protestant; single. Became insane at puberty with the usual silliness and occasional destructiveness of hebephrenia, many of the peculiarities of which he still preserves. Destroys his clothing, chews scraps of paper and rags, mimics others, and has very clownish manners; constantly in motion, but not belligerent; is mischievous to an extreme. Has three brothers insane, and it is reported that other members of his family are also insane, also that only one of the family living is sane, a sister, who visited him in Nov., 1882. He recognized her, and talked of old times, wept, and showed more evidences of latent rationality, than ever before or since, while here. Sister said patient was in the Union Army, and suddenly became insane at battle of Vicksburg. His father, who was at one time the Governor of an adjoining State,

died suddenly after severe exertion, supposed apoplexy. Mother died from some form of heart disease. Patient has sleepy, stupid periods monthly, lasting about a week.

Male case No. 40. Katatonia. Adolph C., age 28; admitted Feb. 25, 1877; German; Hebrew; single; tanner. Slight catalepsy merged into stupor once in 3 months, comes on suddenly over night, recovers from it slowly, then fairly intelligent and pleasant; furor appears suddenly, lasting a week or ten days. Last furibund attack Feb. 7, 1884.

Male case No. 42. Epileptic Insanity. Charles C.; admitted April 26, 1877; age 20; Irish; Protestant; single; patternmaker. Insane eight months before admission; beginning of epilepsy unknown; exhibits mental hebetude; never attempted mischief; is unconscious a little while after paroxysms, which appear daily, often three or four attacks in twenty-four hours.

In many cases of insanity complicated with epilepsy, after terminal dementia has been reached, as in this case, the epileptic paroxysms cease altogether. In this instance the dementia is not profound, but the epilepsy persists. The varying phases of this form of insanity are well worthy of deep study, as offering a probable solution of much that is now unknown in cerebropathology and epilepsy. Any asylum official who will carefully record all he can gather relating to his epileptics, will be able to make some valuable deductions in time.

Male case No. 48. Chronic Alcoholic Insanity. John A., age 22; admitted March 12, 1870. Had been on a protracted debauch before admission. Is now stupid, amnesic, inclined to mutism; sleeps fairly well; tongue tremulous; pulse quick and compressible; heart's action violent; fairly nourished; complains of sickness in stomach and head; tries to escape; troublesome. Has idle, obstinate periods about once or twice yearly, when he refuses to work. Is confused, erotic, and has hypochondriacal delusions; usually works on the farm.

Male case No. 57. Secondary Confusional Insanity. Mortimore McC., age 50; admitted Nov. 1, 1878; Irish; married; laborer. Loquacious; pedantic; self-complacent; dresses neatly; says he owns $4,000 property in Vermont, imagines himself a

great admiral and talks much of naval fights; was two years in Elgin asylum before admission here. Had delusions of persecution and grandeur at home. Threatened daughter, but otherwise not homicidal or suicidal. Did not drink to excess; was struck on head when 20 years of age while trying to defend a woman from abusive husband. Injury apparent over posterior fontanelle; depression of bones, teeth defective. Had typhoid fever when a young man. Since Dec., 1884, more excitable, increasing by March, 1884. Talks incoherently until questioned, and then answers connectedly.

Male case No. 59. Secondary Confusional Insanity. Daniel P., aged 32; admitted Jan. 26, 1879; American; married; bricklayer. Was in Andersonville prison during war, since when has complained of pain in chest, left side; two years afterwards began dizziness with night sweats, congestive attacks with cramps followed, for which he was treated with cod-liver oil. Mental trouble began with delusions of persecution five months before admission. Until Dec. 30, 1883, worked in asylum kitchen, but tried to stab a fellow-patient and was, since then, kept on ward. No heredity. Delusions of grandeur. Imagined he knew more than any one in the world, owned everything, and could scoop up diamonds from his window sill. The present phases of his insanity indicate that paranœa was his primary defect.

Female case No. 162. Hysterical Insanity. Fanny F., age 21; admitted April 4, 1882; German; Hebrew; single. Incoherent, hysterical, lies on floor, generally sillier every other day; weakly. Irregular and painful menstruation. Aunt insane in this asylum.

Female case No. 153. Mania. Elizabeth G., age 50; admitted Jan. 14, 1882; German; married. Insane two months before admission while convalescing from attack of variola. Has a brother insane in Germany. Imagines she is rich and has other expansive delusions; harmless; no persecutory delusions; sighs and talks incoherently at times, generally quiet, neat; works on ward. keeps her head bound around with handkerchief, for, she says, her head aches. Last attack of furor Feb. 21, 1884.

Female case No. 151. Terminal Dementia. Maggie W., age 39; Pole; single; domestic. Last admission Dec. 1, 1881, previously here three times since 1877. Began as melancholia with delusions of persecution, and sometimes hallucinations of sight. Complained much of headache. Mother died of "dropsy." Patient had been working hard and caught a severe cold. Nostalgia and her mother's death preyed upon her mind greatly.

Female case No. 149. Epileptic Insanity. Belle G., age 14; admitted Oct. 20, 1881; American Celtic; single. Epileptic every two or four months since 5 years of age. Talkative before or after paroxysms, usually before. Between attacks grows haggard and old-looking; reticent. Once for 24 hours last year, spit froth all over her room continuously. Epilepsy said to have originated through a fright. Is rendered stupid and more childish after each paroxysm. Feb. 7, 1884, epilepsy. Feb. 10, silly, obtrusive; twists face to left side in talking. Feb. 16, succession of convulsions past three days. Feb. 27, one attack. Recurrences often in March and April. May, 1884, more demented.

Female case No. 148. Secondary Confusional Insanity. Ida M., age 36; admitted Sept. 29, 1881; German; married. Four children, youngest 7 years old, after birth of which she became insane, hence originally puerperal insanity, which has advanced to the terminal condition of secondary confusional. Was at first extremely furibund and dangerous, but began with raptus melancholicus (the terrorized fury of melancholia), sitophobic, with other delusions of persecution. Formerly at Elgin asylum, and has had a previous attack. Heredity denied, but her mother died of nostalgia, which does not support the claim. Patient sews; cries occasionally because detained here. Scolds about domestic affairs, pins papers to her hair, and otherwise shows progress toward terminal dementia.

Female case No. 133. Secondary Confusional Insanity. Louise H., age 44; admitted March 31, 1881; German; domestic; widow. Imagines she is rich at times. Incoherent; cheerful usually, but scolds if opposed and talks vilely; idle; was in poor health upon admission. Mother died aged 73, with "enlarged liver." Father living and healthy. Patient had previous attacks, two

or three in last 15 years, beginning with "stomach cramps," following business trouble. Lost property through law-suit. Had eleven children, one of whom at least is advanced in phthisis pulmonalis. Her insanity began with violent furor.

Female case No. 132. Hypomoria. Maria B. N., age 55; admitted March 24, 1881; Alsatian; married; strong and stout. "Father slightly insane after a law-suit with brother." Great chatterer and scolder. Has a very pleasant voice and sings much, but scolds more, not angrily, but as though jesting. Fond of playing pranks upon her fellow-patients. Is very jolly, but tiresome withal, for her exuberance lasts from morning to night, and from one year's end to the other. Delights in being entrusted with keeping order upon the ward, and is an efficient worker.

Female case No. 131. Secondary Confusional from mania in puerpero. Mary C., age 29; admitted Feb. 6, 1881; Irish; married. Grandmother died in insane asylum in Ireland. Insanity began with depression when child was four months old, but rose to furor soon afterward. Has grandiose delusions; talks to visible and invisible people about the wealth and respectability of her people; maintains a haughty bearing, and makes faces at all around her. Irritable always, and obtrusive, but not destructive or otherwise offensive.

Female case No. 115. Mania. Hannah B., age 37; admitted Aug. 25, 1880; Irish; married. Verbigerative; incoherent; sleepless; delusions of persecution; talks vilely when furibund; at other times is fairly coherent. Says when 13 years old was struck on head with a skillet, and three days after became insane, and was taken to an asylum in Ireland. Verdict states her insanity as hereditary, but does not mention source of information.

Female case No. 114. Terminal Dementia. Eunice S., age 50; admitted June 17, 1880; American Celtic; married. Sleepless; neat habits; imagines her husband is coming for her daily; amnesic; cannot tell people apart; no furor, but objects and squabbles when being bathed. Domestic trouble alleged cause of insanity, which began as melancholia. Her menses were irregular six years before admission, and about the time of appearance of melancholia, she expectorated blood for a day each month.

Male case No 67. Paretic Dementia. Joseph Le V., age 33; admitted Feb. 5, 1880. Pupils irregularly dilated; speech and gait ataxic; general anæmia. Verdict alleges a hereditary cause of insanity. Was filthy and covered with vermin upon admission. Ataxia increased by March 5, 1880, and by last of September, 1880, was quite demented, in which condition he has remained latterly, confined to bed.

Male case No. 65. Secondary Confusional Insanity. Wm. B. D., age 22; admitted Oct. 9, 1879; American; clerk; single. No heredity; refused to speak; was bill clerk in a large wholesale liquor store in Chicago; drank to excess; discharged and taken to Utica, N. Y., Insane Asylum. Had syphilis in 1875. During 1880 worked a little on ward. March 1, 1881, filthy, eating his own excrement; decorates room with filth. Cacophonous; yells constantly "king crown, king three crown, mealy moe." Crosses his hands when he wishes to shake hands with any one. Not violent unless thwarted.

Male case No. 71. Epileptic Insanity. Daniel D., age 31; admitted Nov. 28, 1880. Very violent at first, less so latterly; head injured when 7 years old; left parietal region depressed. Recent epileptic seizures Jan. 1, 1884; Feb. 13, with furor following at night; Feb. 27, fell from bed in convulsion; Feb. 28, another attack, and one upon March 15, 1884.

Male case No. 86. Secondary Confusional Insanity. Jas. D., age 42; admitted July 28, 1881; Irish; married. Seven years insane before admission; expansive delusions; quiet; fixed delusions of grandeur; thinks he is a great doctor and very wealthy; formerly furious; quiet now; thinks free-masons are after him. Was sunstruck, and sustained an injury to head in addition. Mother died of phthisis pulmonalis.

Male case No. 84. Epileptic Insanity. August S., age 24; admitted April 22, 1881; German; single. Five to ten epileptic seizures daily, with a remission of two weeks or thereabouts. Irritable after fits; threatens suicide; attacked brother-in-law; works during remissions. Condition after attacks varies, often may be demented or irritable. Feb. 18, 1884, attack, followed by severe vomiting; Feb. 24, 1884, violent furor after fit; tried to strike and bite attendant 48 hours afterward.

Male case No. 74. Mania. Hubbard S., age 25; admitted Dec. 16, 1880; laborer; single. Was a convict in Joliet prison Feb. 2, 1870, and three years thereafter became insane. Unsystematized delusions, frequent furor, fights and tries to escape. Pyromaniacal. He set fire to this building three times before caught at it. Verdict states his imprisonment as cause of insanity, and this suggests the medico-legal points often involved in such cases. Paretics often commit the fights and other crimes in the beginning of their insanity, are sent to prison—the mental failure at this time not being easy to recognize—and when the insanity becomes gross enough to be noted by the prison physician, they are rejailed in asylums as rendered insane "through imprisonment." Requisite knowledge of this disease at the outset would save many a family the odium of criminality alleged, where there was pure insanity instead. The history of this particular case is not well enough known to enable the statement that this patient was or was not insane before imprisonment. But, while the insane are often sent to the penitentiary and hanged for crime (recently a madman was carried to the gallows in New Jersey in a strait jacket), the contract system of leasing labor in penitentiaries causes insanity direct. On the Mooney trial, in this State, Dr. Kiernan informs me, it was testified that twenty-five lunatics have been sent from the wire department of the Joliet prison within the recollection of one man. Dr. K. says the narrations on that trial sounded like those in Charles Reade's "Never Too Late to Mend."

Male case No. 88. Secondary Confusional Insanity. Edward C., aged 24; admitted Dec. 1, 1881; American Celtic; single. Arrested in Chicago and convicted for being principal in robbery and red pepper throwing operation with a negro and boy, wherein a large amount of money was taken. Was always bad, unreliable and treacherous; kicks, bites, strikes, and spits at every one; mutters in sleep. Father myopic and mentally "peculiar," mother sane; sister blind; brother myopic. Rapidly passing to terminal dementia.

Male case No. 98. Paranœa. Daniel O'C., age 25; admitted Feb. 27, 1882; Irish; single; laborer. Scorbutic December, 1883; fancies he was mistaken for Guiteau; says he will not

leave the asylum till he has damages for false imprisonment. Usually quiet, but when excited talks of Guiteau trial. Says there is no law in the land to protect greenhorns like himself. Makes stump speeches favoring land-leaguers, and against the English.

Male case No. 99. Epileptic Insanity. John S., age 18; admitted March 1, 1883; American Celtic; single. Father died with phthisis pulmonalis. Patient, when 6 years of age, had severe pneumonia, followed by epilepsy, five to ten fits daily, with remissions of several weeks. After paroxysms very morose, and easily angered, then delusional and destructive; broke three doors and several windows once at home; threatened to kill step-father, whom he always disliked. During remissions is quiet and rational. Had a severe fall some years ago upon head, which confined him to bed awhile.

Male case No. 100. Secondary Confusional Insanity. John McN., age 36; admitted April 13, 1882; Irish; single; blacksmith. Suicidal; refused food; prayed loudly at first; talks coherently; usually quiet; refuses to work; gesticulates; has delusions of persecution; thought people would kill him. Hallucinations of sight and hearing. Saw and heard the dead walk, and talk. Was intemperate and religiously excited. Cousin on paternal side committed suicide while insane.

Male case No. 102. Epileptic Insanity. George M., age 22; admitted March 30, 1882; American; single; laborer. Sometimes has epilepsy, and no outbreak follows, but is very destructive when it does follow. Often has full "warning;" then asks attendant to take care of him, as he is about to have a fit. Has remissions of a month, but the least excitement, as a dance or dispute, causes them to recur. Ran away several times; once engaged to a farmer, who did not discover his malady for some time. Broke down door here once. Last attack March 10, 1884, with great furor following.

Male case No. 115. Chronic Alcoholic Insanity. Christian L., age 58; admitted July 13, 1882; German; married; farmer. Eye injured; says it was scalded out. Very intemperate. Tries to kill his wife every time he returns home. Talks rationally, but full of delusions concerning his wife.

A remarkable feature in alcoholic insanity is the usual delusion of marital infidelity. Wherever this delusion appears, the alcoholic causation may be safely presumed.

Male case No. 124. Chronic Alcoholic Insanity. E. R., age 62; admitted August 24, 1882; German; married; musician. Drank excessively, and became abusive and dangerous to relatives. Was leader of a musical society for ten years in Chicago, and a recognized proficient in music. Amnesia of senility; cannot remember recent events from one day to another, but remains an excellent musician. Has difficulty in recalling names of his pieces, but plays them when the tune is started for him. Has the delusions pertaining to marital matters common in inebriates advanced to this stage, and cannot be kept at home owing to his abusiveness to wife and children. At all times insists that he has been here only four or five weeks. Delights in teaching music and playing for amusement of patients. Is quite a favorite with everyone here, and it is difficult to realize how great his mental failure is, while his every day demeanor here is irreproachable. It is commonly observed that drunkards who may be demons abroad, exhibit latent excellencies of character during asylum sojourns which were little suspected before as existing at all in them.

Male case No. 135. Epileptic Insanity. Samuel A., age 32; admitted September 21, 1882; American; single; machinist. Pyromaniacal and suicidal. Often six to ten epileptic attacks nightly, followed by sullenness and violent furor. Has delusions of persecution and hallucinations. Liquor or tobacco injures him, by rendering epilepsy more frequent. Has been epileptic nine years. Attacks approaching indicated by his singing and noisiness; makes peculiar opisthotonic movements generally before fits. February 14, 1884, post and pre-epileptic furor; struck a patient with spittoon, upset tables and benches, and fought attendants. February 16, furor as before; broke window during night. March 3 and 18, 1884, furor followed epilepsy.

Male case No. 140. Mania. Jos. H., age 22; admitted October 19, 1882; single; carpenter. Has subjective sensations of having been struck, as he frequently whirls around and strikes others, claiming he was struck by them first. Complains of pains

in knee mornings; says he is rheumatic, and that his chest hurts him. During furor, bit an attendant's leg severely. Improving since December, 1883.

Male case No. 142. Secondary Confusional Insanity. John R., age 27; admitted October 26, 1882; German; single; maltster. Insanity began as mania one week before admission. Imagined the devil was after him; suicidal; incoherent; talked incessantly; quarrelsome when disturbed; hallucinations; complains that people accuse him of murder and arson, and that he is guiltless of either. Corpulent. Mother, grandmother, and sister insane.

Male case No. 144. Choreic Insanity. Frank G., age 20; admitted November 2, 1882; American; single; upholsterer. Chorea began four years before admission, gradually merging into insanity. Obstinate; costive; noisy at night; mischievous; destructive; talks foolishly. Father died of "paralysis." Patient was greatly benefited, physically, by Squibbs' fl. ext. conium, and was tried at home, but returned in four days, December, 1883. Is in constant motion, jerking body in all directions. Gradually growing demented.

Male case No. 307. Melancholia. Anton R., age 25; admitted October 25, 1883; Pole; married; gilder. Was afraid of everyone; thought doctors after him to cut him up. Liquor in small quantities affected him badly; suffered from headache. Stole $170 from a saloon-keeper, and afterwards returned $70 to police voluntarily. Mother also in asylum, female case No. 368. Some indications of plumbic toxæmia led to appropriate treatment, and he grew better mentally awhile, but relapsed.

Male case 154. Melancholia. Alex. H., age 42; admitted Dec. 8, 1882. American; married; railroad fireman. Delusions of persecution. Insanity began in 1879, when his youngest child was run over by cars and lost an arm. He was never intemperate. All his relatives nervous and excitable. His father died in arrisburg, Pennsylvania, Asylum, in 1840; sister died in Jacksonville, Illinois, Asylum, in 1872.

Male case No. 161. Secondary Confusional Insanity. Wm. H., age 44; admitted Dec. 21, 1882; American; laborer; single. Preserves much of former maniacal disposition. Inces-

sant, incoherent, vile talker; was in Stockton, California, Asylum. Constantly talks of A. G. Shurtleff, the superintendent of that place. Is the vilest-spoken male patient here, and not to be trusted with his fists, but is allowed occasionally to take a run outside without the least danger of his leaving. It is surprising to notice how much will power he can exert. At the Saturday evening dances he behaves himself, utters not a word, and evidently restrains himself by keeping his lower lip clenched between his teeth to prevent the usual torrent of abuse escaping him. His passage toward terminal dementia is slow but noticeable.

Male case No. 167. Senile Dementia. E. W. W., age 73; admitted Jan. 27, 1883. American; married; farmer. Usually mild-mannered and quiet; feeble with age. Occasionally hallucinated and incoherent. Assistant physician Thuemmler noted that his attacks of mild furor are preceded by patient's sticking his pants in his boots, and the doctor finds this an excellent signal for treatment.

Male case No. 173. Melancholia. Anton D., age 55; admitted Feb. 15, 1883; German; married; expressman. Poorly nourished. Relatives state that in 1879, burglars chloroformed him, and he never was the same man afterward. Tried many ways of self-destruction, even once by starvation. Delusions of persecution; thinks every one wishes to kill him; refuses to accept anything from his relatives, as he thinks they are starving.

Male case No. 197. Melancholia. John S., age 58; admitted April 12, 1883; English; married; clerk. Temperate. Sat up nights to watch his children, fearing something would befall them while they slept. Was wealthy at one time, and while actively employed, thought little of his misfortunes. Four months before his admission, lost situation, and melancholia followed; thought his food was poisoned. Tonics, laxatives, and at night sleeping potion administered; gradually recovered, and discharged August 7, 1883.

Male case No. 132. Mania. C. K., age 43; admitted June 7, 1883; German; married; commerce; insane one month before admission. Thought he saw ships and sailors, drew marine sketches; mind reverted to his sailor days. Was overworked and had business trouble; had always been kind to wife before, but

turned against her while insane; struck her in face in December, 1883, during a visit she paid him. February, 1884, began to recover, and March 17, 1884, sent home apparently recovered.

Male case No. 242. Mania. Fred. P., age 60; admitted June 28, 1883; German; married; tailor. Was arrested in 1870 for some trivial matter, and became maniacal in jail. Had been intemperate; tried to set fire to his son and to kill his other two sons. Furor recurred about monthly, lasting one or two days. During remissions pleasant and jocose, but easily excited. Ran in streets when furibund. People made fun of him, and saloon-keepers dosed him with swill beer and filth. Died July 6, 1883. No autopsy allowed.

Male case No. 272. Acute Alcoholic Insanity. Wm. H., age 40; admitted Aug. 9, 1883; Norse; widower; cooper. The cooper for whom he worked noticed his face flushed and that he appeared confused. Said he was waiting for a man; trembled violently. Discharged recovered Sept. 16, 1883.

Male case No. 277. Mania. James F., age 25; admitted Aug. 16, 1883; American; married; laborer. Insanity began October, 1882. Over-mental strain alleged cause. Delusions of grandeur and persecution; hallucinations of vision and hearing; very jealous of wife. Furor every two or three weeks; head cut by bruisers right parietal region and over top of frontal region. Father irritable; mother insane since 1878; sister in Wisconsin Insane Asylum. Wrote a letter to Gen. Phil Sheridan, asking him to take him hence.

Male case No. 224. Paranœa. Christian S., age 50; admitted May 31, 1883; German; farmer; quiet and industrious. It required considerable questioning to bring out his delusions. He thinks a certain neighbor bewitched him, and it is necessary for him to fire off a gun once in a while to break the spell cast over him. His otherwise apparent sanity led to the issue of a *habeas corpus*. In court Dr. Thuemmler was asked why the patient had not been discharged from the asylum. The doctor

replied, because the medical men did not wish to take the responsibility of turning loose a monomaniac, who might do harm, When asked if he thought the patient's delusion might lead him to shoot his neighbor, Dr. T. said he could tell as little about that as the judge could, and that as to allowing him his liberty, it was for the judge to decide the advisability of so doing. The superintendent of the asylum was not, under the circumstances, willing to assume the risk of such discharge. He was remanded to the asylum. He thinks forty-two different witches crawl down his throat, and that ghosts talk to him. Upper part of nose deeply indented by kick from a horse when patient was a boy. Frontal injuries, in my observation, are frequently associated with paranœa.

Male case No. 69. Paranœa. Anton N., age 49; admitted July 8, 1880; Poland; cabinet-maker. Is very ingenious at his trade; has made for himself a full set of tools used in his occupation from odd pieces of wood, iron, glass, tin, etc.; makes very tasty cabinet work of all kinds. I have a very handsome frame made by him to hold panes of glass as a cover for my laboratory microscope. The joinery is perfect. When this patient is "off," he yells defiance at the devil. He cut a dragon-winged image of a female from wood and suspended in his window to bother Lucifer "with a picture of his wife." I asked him once if he would not like to be at liberty. "Yes," he replied, "I would be happy if I could go to Chicago to kill two men there who are in league with the devil against me." Noticing the facial anæmia during his paroxysms, they can usually be averted by stimulants.

Male case No. 212. Paranœa. Gottlieb H., age 40; admitted May 10, 1883; German; painter; single. Imagines temperance people and Lutheran priests persecute and follow him; well-behaved and good-natured; assistant to asylum painter; verbigerative when talked to; anæmic at times; complains of occasional headaches; frontal transverse rugæ well marked, particularly when talking. He says both his parents are in an insane asylum in Eslingen, Germany. He carries scraps of newspapers detailing an attack he made upon a Mr. C. H. Peck, of Atchison, Kansas,

in 1880. Says he was struck by lightning in September, 1880, but was not hurt; felt only a little burning sensation in his stomach. A photograph of himself, which he says was taken in January, 1883, resembles him but little now. The picture shows a man of ordinarily intelligent appearance. He must have deteriorated in features rapidly. Has transitory hallucinations, and desire to get justice for having been sent here. Answers description of querulous monomania, "*Querulanten-Wahnsinn*" of the Germans.

Male case No. 289. Melancholia. J. S., age 30; admitted Sept. 13, 1883; German; married; printer. Sensational case published in Chicago *Tribune* Sept. 14, 1883. Fell in love with a young girl who lived with his wife. The feeling seems to have been reciprocated, for the young lady committed suicide, and both patient and his wife identified her body when taken from the lake. Later, patient attempted suicide in river. He had unsystematized delusions of persecution, with hallucinations of sight; thought he saw the young lady alive, and also many of his friends who had long been dead. His mind became clouded at the inquest of the young girl, and he walked about with a dazed, troubled expression. It was with difficulty he could be led to talk of anything but his misfortunes. Anæmia indicated tonics, and much was done to interest him in general matters. He was finally induced to read articles in *Zeitschrift für Psychiatrie* and other German medical journals, and seemed startled into recognizing cases similar to his own reported therein. By the last of September his mind had become decidedly clearer, and Oct. 14, 1883, he was discharged. Jan. 1, 1884, he called to convince us of his recovery. He is a compositor on a German paper. Says he is seldom depressed now, and when ideas of persecution arise he reasons himself out of them, recalling the instruction he received while here. The possession of a mental background which may be educated to withstand insane tendencies is an all-important feature in some forms of insanity; of course, in paretic dementia it avails nothing, but should be appealed to wherever hope exists.

ARTICLE IV.

THE REMOVAL OF NASO-PHARYNGEAL FIBROMATA BY THE GALVANO-CAUTERY, OR STEEL WIRE ÉCRASEUR.

By E. FLETCHER INGALS, A.M.M.D., Chicago.

Naso-pharyngeal fibromata usually have their origin in the periosteum which covers that portion of the base of the skull forming the roof of the naso-pharnyx.

These tumors may extend downward into the mouth, forward into the nasal cavity, or upward, perforating the cranium and pressing upon the brain.

When large, they not infrequently send off prolongations into the maxillary sinus, and in some cases the frontal and sphenoidal sinuses are involved, consequently in some instamces great deformity of the face results.

Owing to the obstruction thus caused, respiration and deglutition may be seriously interfered with, and in consequence of the pressure, the senses of hearing, sight, and smell are more or less impaired.

The growths are hard to the touch, and are usually rounded, having a smooth surface, slightly lighter in color than the surrounding mucous membrane; sometimes, however, and particularly when the nasal cavities are involved, these tumors are lobulated in form.

Some of them grow slowly, but in other cases they increase in size with great rapidity; and, unfortunately they are quite liable to return after removal.

Aside from the symptoms already referred to in connection with the special senses, they may cause severe pain, frequent epistaxis, and constant catarrhal discharge. They eventually disturb the sleep and prevent the patient from taking sufficient food; exhaustion supervenes, and ultimately if not removed, they are liable to prove fatal.

Various forms of treatment, such as electrolysis, the local application of chemical agents, have been tried, but nothing short of a complete destruction of the growth by operative measures can give satisfactory results.

The operation usually recommended by surgeons, consists in

tearing or gouging out the tumor after access to it has been obtained, by removal of the hard and soft palate, or of the superior maxillary bone, the latter being the procedure generally resorted to; but within a few years rhinogologists have demonstrated the practicability of a much safer operation, which has thus far been attended with better results than when the maxilla, or palate, has been removed.

This operation is performed with the galvano-cautery, or steel wire écraseur, the loop being passed through the nostrils in some cases, and in others through the mouth and up behind the soft palate.

Within the past two years I have operated on five cases of naso-pharyngeal tumors by this latter method, and with better results than could have been obtained by excision of a part or the whole of the superior maxillary bone.

In four of these cases over a year and a half have now elapsed since the last operation, as their histories will show. In the fifth the growth appeared microscopically of a semi-malignant type. It is not here reported, but the tumor has been removed, and is now growing again; however, owing to the patient's great improvement in health, and to the histories of two of the other four cases, which I have heard from lately, I do not despair of ultimately curing the patient.

CASE I.—Fibroma. In May, 1881, I operated upon the first case of this kind which had come under my observation.

The patient, J. W., æt. 21, stated that about twenty months previously he had contracted a severe cold, since when he had been unable to breathe through the right nostril, excepting with forced respiration, and then but slightly. The left nostril had also been occluded whenever he had a cold, but at other times it had been comparatively free.

Rhinoscopic examination revealed a large ovoid tumor blocking the right posterior naris and overlying about half of the left. With the galvano-cautery écraseur I removed the larger part of the growth and would have secured all, had not the current failed me so that I was obliged to readjust the wire. The bleeding prevented me from doing this perfectly.

Prof. I. N. Danforth, of Chicago, made a microscopic examina-

tion of the tumor, and pronounced it a small celled-sarcoma, the most benignant of the fibromata.

A few weeks later the remainder of the growth was perfectly removed by the galvano-cautery écraseur.

Sixteen months later I found a small tumor at the seat of the old growth, about the size of a hazel-nut. This I removed with Jarvis' écraseur.

At the present time, three years after the original operation, a small sessile swelling may be seen at the posterior end of the upper turbinated bone. This presents no point where the écraseur could be made to hold, and as it has enlarged very slowly, I have not attempted to cauterize it.

CASE II.—Fibroma. H. L., aged 19. Was brought me by my friend, Dr. F. E. Olney, of Warsaw, Ind. I found a large naso-pharyngeal growth, which presented slightly below the soft palate, and filled the naso-pharyngeal space.

It had been annoying him very much for twelve months; preventing nasal respiration and causing profuse discharges from the nose and pharynx. The tumor was so large that I found it impossible to pass Bellocq's canula or an Eustachian catheter through the nares; however, after much difficulty, I succeeded in passing a small, soft rubber catheter. In doing this, all excepting half an inch of the distal end of the catheter had been kept rigid by the stilet so that when pressure was made the flexible end insinuated itself between the growth and the palate and was finally forced into the pharynx and brought out through the mouth. A string was then attached to it and drawn back through the nose, by which means an elastic band was drawn through the naris to tie the soft palate forward; and subsequently a loop of platinum wire was drawn back through the naris into the mouth.

The loop was opened, and by patient manipulation for about three hours, it was carried up until it encircled the base of the tumor, close to the bone from which it sprang. The ends of the platinum wire were then passed through the tubes of an electrode which was forced back along them through the nose until the tumor was tightly ensnared.

The handle with which the conductors from the battery were

connected, was then attached, the platinum wires fixed to the ratchet and the current turned on; but I soon found that a short circuit was established through the metallic axle of the ratchet wheel, so that the pedicle could not be burned. I then removed the ratchet and attached the wire to a lead pencil, by means of which traction was made. The current then passed through the loop, heated the wire, and the pedicle was speedily cut and the growth ejected from the mouth.

Because of failure of the ratchet the base of the tumor was accidentally divided much quicker than I wished, and as a consequence profuse bleeding ensued; this, however, was checked in a short time by the insufflation of tannin behind the palate.

The tumor was slightly nodular in form, and measured one and one-half inches in its antero-posterior diameter, by one and three-fourths inches in its vertical diameter.

It had been cut off close to the basilar process of the occipital bone to which it had been attached by a pedicle three-quarters of an inch in diameter.

The patient returned to his home the same evening. The cut surface healed over promptly, and for two months he seemed perfectly well, but at the end of that time Dr. Olney noticed that the tumor was re-appearing. It grew rapidly for about two months, when it had attained about one-third its former size, since when it has remained stationary.

The patient's general health has been perfect for the last eighteen months, and there has been no increase in the size of the tumor, but it will be again removed as soon as the patient can spare the time, and then the stump will be thoroughly cauterized.

CASE III.—Fibroma. A charity patient. J. H., æt. 26, came to me during the latter part of the winter of 1882-83, complaining only of a slight cold. I noticed a peculiar lack of nasal resonance in his voice which directed my examination to the naso-pharynx, where I found a tumor about the size of a hickory-nut, which from its position and from the movements that could be given to it with a probe seemed to be attached to the upper portion of the posterior border of the vomer.

With a modification of Jarvis' ècraseur, half an inch of the end

of which had been bent up at nearly a right angle, I passed a steel wire behind the palate and ensnared the tumor and cut it off.

The tumor presently dropped into the mouth and was ejected. It had the form of a flattened sphere, measuring one inch in its long diameter by one-half inch in thickness. Dr. E. P. Davis, of this city, examined the growth microscopically, and reported it almost wholly fibrous. Afterward a similar but smaller growth was detected in the posterior part of the left nasal cavity, which subsequently came down into the naso-pharynx. I made one attempt to catch it in the snare, but failing on the first trial, I was obliged to defer the operation for want of time, and the patient did not return.

CASE IV.—Fibro-Myxoma. A. P., æt. 32, machinist, came to my clinic at the Central Dispensary in December, 1882. He gave the following history: When two years of age his mother had noticed something growing in his nose, but nothing was done for it until he was fourteen years of age, when it was operated on by forceps, and a large mass removed.

Subsequently he was free from the trouble for several years, but at the age of nineteen it had returend soas to necessitate another operation.

From that time until about a year before coming to me he had experienced no difficulty in breathing through the nose.

Upon examination, I found a large growth completely filling the right nasal cavity, and closing the left by pressure; and causing considerable deformity of the nose.

It also passed back and filled about half the naso-pharynx.

After several futile attempts to tear away the anterior portion of this tumor with forceps, about a third of it was cut off with the galvano-cautery wire loop. Finally, with a modification of Jarvis' snare, all the growth was removed. In this case it was impossible to engage any considerable portion of the tumor at once, as the instrument could not be passed through the nose until most of the growth had been taken out; therefore, at each sitting, I removed two or three pieces about the size of filberts, and then allowed the patient to go. Dr. E. A. Davis found this to be a fibro-myxoma.

At the meeting of the American Laryngological Association

held in New York, in May, 1883, Dr. Rufus P. Lincoln presented three cases which he had operated upon successfully by the galvano-cautery écraseur. For the sake of comparison, he also gave a tabulated statement of the results of seventy-four operations for naso-pharyngeal tumors which he had found reported.

The statement which has been furnished me by Dr. Lincoln is substantially as follows:

The seventy-four operations were performed on fifty-eight patients.

Thirty-nine operations were done upon twenty-eight patients by section of the facial bones or lying open of cicatrices resulting from previous operations of the same character. Of these, in thirteen, the record ceased shortly after the operation, and the final results were unknown. Of the fifteen remaining, eight died from the operation, and in three others it nearly proved fatal, while in only four was there no return of the tumor within a year.

Seven operations were done on seven patients by scissors, knife or forceps. One of these died, five were lost sight of, or no subsequent report was made, and in only one are we told there was no recurrence within a year.

Two cases had been treated with injections of chloride of zinc, or cauterization by the same agent. In one the tumor returned, the other case was lost sight of. Three cases were treated by electrolysis. One did not recur within a year; the others disappeared. Of these forty cases, in twenty-one the history after the operation was incomplete, and probably not favorable to the operation.

Nine, nearly one-fourth of all the cases, or about one-half of those in whom the history was complete, died, and only seven remained well for one year.

Contrasting with these the cases operated upon by the ordinary écraseur, or ligation, we find that of eleven operated on none were fatal, two were lost sight of, and of those remaining there was no recurrence at the end of a year in four cases, which is a very much better showing than for the preceding operations.

Nine have been operated on by the galvano-cautery écraseur, and one by the actual cautery. None of them were fatal; two

were lost sight of, and six were well at the end of a year, results infinitely superior to those of any of the other methods.

The remarkable success of this form of treatment is supposed to have been due to thorough cauterization of the stumps of the tumors, which was practiced in several instances.

In my own cases, the stumps of the tumors have not been cauterized, but although there has been some new growth in the two still under observation, there has been no enlargement for over a year in one, and over two years in the other; and neither now gives the patient any discomfort.

In two others, occurring in dispensary patients, the disagreeable symptoms having been removed, it is probable that I will not see them again until the tumors have re-grown sufficiently to be annoying. One of these was cured at the time. In the other the operation was incomplete.

From my experience in these cases, I believe that either with the galvano-cautery or with the steel wire écraseur the great majority of these tumors may be completely removed, and, as has been shown by Dr. Lincoln, if their bases are thoroughly cauterized with a hot wire, they are not likely to recur. As illustrated by two of my cases, although they often recur the subsequent growth may be very small in comparison with the first, and after a short time it may become quiescent.

The results thus far are certainly in favor of this method of operating in most cases of naso-pharyngeal fibromata over that usually advised by surgeons. The advantages are, that this leaves no scar: the tumors are less likely to recur, and the risks to the patient are infinitely less.

ARTICLE V.

ON GELSEMIUM SEMPERVIRENS. By CHARLES GILBERT DAVIS, M.D., of Chicago.

The present advanced state of medical science is due in a great measure, if not entirely, to the recorded experience and observation of thinking men. If this be true, would it not be well if

all physicians engaged in the active practice of their profession, made a special endeavor to observe more closely and record more accurately the various symptoms manifested by the action of medicine on the human system. A neglect of this on the part of many physicians has given rise to what we may properly term the "school of skepticism." They disbelieve entirely in the action of medicine to relieve disease, and often, while manifesting a sublime indifference to the appeals of the poor sufferer before them to be relieved, go into ecstasies over the pathology of the case, and are plethoric with theories in regard to the ultimate nerve-cells or molecules wherein the disturbing action arises.

Be it understood, I cast no reflections upon scientific investigation in these directions, but the true office of the physician is to prevent, cure, or alleviate disease, and in proportion as he fails in this, he fails to fulfil his mission.

To-night I lay before you my recorded experience in regard to the action of a remedy which for a number of years has been under my observation.

Gelsemium sempervirens, commonly known as the wild, yellow, or Carolina jessamine, is indigenous to the United States, and is found growing in great abundance in the rich soil on the borders of streams near the sea coast, from Virginia to Louisiana. It was first described in 1610 by John Parkinson, who cultivated it in his garden. It has a climbing stem; opposite, lanceolate, dark-green leaves; and axillary clusters of bell-shaped, yellow, fragrant flowers, the perfume of which has been compared to that of the wall-flower. The root, the part used in medicine, is fibrous, and owes its medicinal action to the presence of an alkaloid, gelsemia. According to Eberle, the central woody portion of the root does not contain any alkaloid, and therefore the bark really contains the active medicinal properties. I have been closely observing the action of gelsemium on the human system for a number of years, and am convinced there is no article of equal merit in the materia medica which has received so little notice, and concerning which so little is known. The object of the present paper is not so much to discuss the numerous theories concerning its mode of action, as merely to give a synopsis of these theories, and then to

add my own testimony in regard to its therapeutic application, based upon personal experience and observation.

Some one has said that the medicinal action of this remedy was discovered by accident. A Southern gentleman who was sick with a fever, sent his colored servant into the garden to obtain the roots of a plant which he indicated, in order that he might prepare a decoction for himself and thus alleviate his disease. The servant made a mistake and obtained instead the roots of the yellow jessamine. The tea was prepared and drunk, however, and the patient breaking out into a profuse perspiration and recovering so soon from the fever, made inquiry as to what he had taken. He was so delighted with the result that he immediately recommended it to others who were similarly afflicted.

Gelsemium owes its medicinal action to the presence of an alkaloid, the active principle gelseminia, or gelsemia. A number of interesting experiments have been conducted by several observers in regard to the nature and action of this principle, the most conclusive of which are probably those by Professor T. G. Wormley. To him, undoubtedly, must be given the credit of having first isolated the alkaloid, and of having also demonstrated the presence of a new organic acid, which he designated gelseminic acid.

His process for obtaining the acid from the extract was as follows: "Concentrate the fluid extract on a water-bath to about one-eighth of its volume, and then add to the concentrated extract several times its volume in pure water, and allow the mixture to stand several hours, or at least until the supernatant liquid has become very nearly or altogether clear. By this treatment most of the resinous matter, held in solution by the alcohol originally present, will be separated. The mixture is then transferred to a filter, the solids well washed with water, and the filtrate thus obtained, together with the washings, concentrated on a water-bath to about the same volume the concentrated extract had prior to the addition of the pure water. The concentrated liquid, after filtration, if necessary, is acidulated with hydrochloric acid in the proportion of one drop of the pure acid for each fluid ounce of the fluid extract operated upon, then thoroughly agitated with about twice its volume of ether; after the liquids have completely sepa-

rated, the ethereal fluid is decanted and the aqueous liquid finally washed with about its own volume of ether.

"On allowing the united ethereal liquids thus obtained to evaporate spontaneously, the gelseminic acid will be left chiefly in the form of nearly colorless groups of crystals. By this method sixteen ounces of the fluid extract of gelsemium yielded about two grains and a quarter of pure gelseminic acid. It is a colorless, odorless, mostly tasteless solid, crystallized in groups or tufts of delicate needles; has strongly acid properties neutralizing bases and uniting with them to form salts which are generally sparingly soluble in water.

"*Gelsemia* may be extracted from the concentrated extract from which gelseminic acid has been extracted by ether, by rendering the liquid slightly alkaline with potash, and then repeatedly agitating it with chloroform, which will dissolve the alkaloid together with more or less foreign matter. For this purpose about two volumes of chloroform may at first be employed, the operation repeated with a similar quantity of the fluid, when finally the alkaline solution is washed with about its own volume of the liquid. The chloroform employed for these extractions is collected in a dish and evaporated at a very moderate temperature, when it will leave a hard, gum-like, yellowish or brownish-yellow residue. This is treated with a small quantity of water and the mixture slightly acidulated with hydrochloric acid, which will dissolve the alkaloid together with more or less foreign matter. This solution is filtered, and the filtrate concentrated to about one-sixteenth the volume of the original fluid extract operated upon. On now treating the concentrated liquid with slight excess of caustic potash, the alkaloid will be precipitated in the form of a more or less white deposit. This is collected on a filter, washed with a small quantity of pure water, then allowed to dry at the ordinary temperature." When further purified by being dissolved in acidulated water and again precipitated by caustic potash, it will appear in the form of a very hard, brittle, transparent mass. When pulverized it forms a nearly or altogether colorless powder.

As to the amount of the alkaloid found in any given quantity of the fluid extract, the only official preparation used, it has not

yet been definitely determined, but Wormley concluded from his experiments, approximately, that it existed to the extent of one grain of gelsemia to two and a half fluid ounces of the fluid extract.

Physiological Actions.—Investigations in regard to the action of the drug have been made by Ringer, Murrell, Ott, and Bartholow. Its various preparations have a narcotic odor and a bitter taste. The active principle, gelseminia, is so intensely bitter that its presence to the extent of one one-thousandth part by weight in solution can be readily detected. It is of a crystalloid nature, and when taken into the system is rapidly diffused into the blood. In regard to its action on the human system and also the lower animals, a number of interesting articles have been written. The most conclusive, however, are probably those experiments recorded by Prof. Bartholow. When administered in small quantities, sufficient to produce a sensible effect, it has a mild, soothing effect over the nervous system, manifested by mental quietude, a tendency to drooping of the eyelids, slight muscular relaxation, slowing of the pulse, and slight dilatation of the pupil; though Prof. Ringer says that this dilatation of the pupil is preceded by contraction. When the dose is much increased, the symptoms are all intensified; and we see manifested double vision, giddiness, pain in the forehead, increased paralysis of the levator palpebræ muscles, causing drooping of the eyelids; labored respiration from partial paralysis of the respiratory muscles; muscular weakness; and general sensibility much reduced. If the dose be still further increased, the symptoms are still more intensified, and we observe that the eyelids are entirely closed from complete paralysis of the levator palpebræ muscles; that the pupils are widely dilated, not responding to the action of the light; and that vision is entirely gone. Muscular paralysis is so complete that voluntary motion entirely ceases, respiration is labored, and the action of the heart becomes weak and intermittent. Consciousness is retained until near the period of death, when it is lost from carbonic acid poisoning, resulting from incomplete respiration. The action of the heart continues for some moments after respiration ceases. From these symptoms it is evident that the prime action of gelsemia is upon the nervous

system, and its action is such as to warrant us in classifying it as a cerebro-spinal depressant, acting principally upon the motor centers. Some little discussion has arisen as to whether its primary action is upon the peripheral extremities of the motor nerves, or directly upon the nerve center. I believe that Prof. Ringer entertained at one time the opinion that its main action was upon the extremities of motor and sensory nerves; but more recently he has entertained the views of Prof. Bartholow, based upon a number of interesting experiments upon warm and cold-blooded animals, that the action is directly on the spinal cord. The order of this action is, however, upon the motor and sensory columns of the cord reversed in cold and warm-blooded animals. In the former, the first effect is on the sensory center; and in the latter, the motor centers are first impressed. In the *Phila. Med. Times*, Vol. V, will be found an interesting account of elaborate investigations carried on by Dr. Ott, in which he arrives at conclusions similar to those of Prof. Bartholow. He intimates that gelsemium reduces the pulse by lessening the irritability of the excito-motor ganglia of the heart; and lessens arterial pressure by diminishing cardiac irritability and vaso-motor tonus. He also, with Prof. Bartholow, concludes that it lowers the temperature. This last fact I consider one of great importance, having seen it verified in many febrile and inflammatory diseases. It would at first appear, from observing the action of gelsemium on the spinal cord, that it would be an efficient antidote to poisoning by strychnia; one excites to convulsions, while the other depresses to exhaustion. This theory, however, is not proven to be true by experiment. My own experiments on dogs have been conclusive in showing that it does not have the slightest influence in antidoting the effect of strychnia. On the contrary, I am inclined to believe that it facilitates or increases the action of strychnia. In order to arrive at a correct conclusion of the matter, I selected two dogs, weighing each within a fraction of ten pounds. To each of them I administered, at the same time, one-fifth of a grain of sulphate of strychnia hypodermically. Five minutes afterwards I gave one, to one-eighth of a grain of the alkaloid gelsemia in the form of a sulphate. In ten minutes from the time of the first injec-

tion, convulsions appeared in the dog that had received both strychnia and gelsemia; while the effects were not noticed on the other till the end of thirteen minutes. In thirty minutes, the animal that had received both poisons was dead, while the other lived forty minutes. It was noticeable in the experiment that in the animal receiving both the strychnia and gelsemia, the convulsions appeared earlier, were far more violent and continuous, and that death resulted ten minutes earlier. I have repeated this experiment a number of times with almost unvarying results. These experiments have not been as complete and satisfactory in this direction as I could wish, but sufficient evidence is obtained to convince me that gelsemium is in no way antidotal to the effects of strychnia; and I am much inclined to believe that, owing to the relaxing effects upon the spinal cord when gelsemium is previously administered, the conditions are rendered more favorable for the action of strychnia, and consequently its effects are intensified.

As antagonistic to, and incompatible with, the effects of gelsemium, we may rely upon alcoholic and diffusible stimulants. Tannic acid and the caustic alkalies may be considered as chemically incompatible with it. As an illustration of the action of alcoholic stimulants in removing the depressing symptoms resulting from the administration of large doses of gelsemium, I may mention a case that came under my observation some three years ago. J. B., aged 45, had been afflicted with muscular rheumatism for a number of years. The muscles of the right side of the neck, particularly the sterno-cleido-mastoideus and a portion of the platysma-myoides, had become so much affected that the chin was tied down to the breast, and mastication and deglutition were performed with great difficulty. A condition of complete torticollis had ensued. In this condition he applied to me to be at least temporarily relieved from the unpleasant and indeed painful muscular contraction. I immediately put him on five-drop doses of the fluid extract of gelsemium, to be taken three times a day, with instructions to increase the size of the dose one drop every day. He had reached a dose of twenty drops, and not seeing any of the usual effects of such a dose, and finding but little relaxation of the affected muscles, I requested him to change his druggist, thinking that perhaps the druggist with whom he dealt

was not furnishing him with a reliable article. It is well known that there is occasionally a druggist who is no more infallible than the drugs he offers for sale to a too confiding public. Two hours after I had dismissed the patient from my office with this advice, he was brought back again by a policeman, who, finding him staggering on the street, had supposed him intoxicated. He showed to a very marked degree the effects of the remedy. The eyes were half closed, with inability to raise the upper lids, vision was obscured, and articulation was very indistinct, with general muscular relaxation manifested by a staggering gait, which so much resembled alcoholic intoxication as to well-nigh excuse the worthy officer, who supposed the patient to be under the influence of strong drink. A tablespoonful of brandy was immediately administered. In about fifteen minutes the patient spoke more distinctly, and expressed himself as much better. The same dose of the stimulant was repeated twice during an hour, at the expiration of which time the toxic symptoms had entirely disappeared, with the exception of a slight sense of drowsiness. This case not only serves to illustrate the antidotal action of alcoholic stimulants to the poisonous action of gelsemium, but also, what is true of many other of our fluid extracts, their frequent worthlessness as to medicinal action, when prepared by unscrupulous manufacturers.

Therapy.—Acting as it does on the great central nervous system, gelsemium must undoubtedly have a wide application therapeutically. In its native Southern region, it has for many years had an extensive reputation as a remedy of great value in the treatment of autumnal malarial fevers. While its efficacy in this direction may have been over-estimated, yet its beneficial effects in malarial fevers are such as to merit our careful consideration.

During several months' practice in the malarial regions of Missouri, I conducted a number of experiments to discover, if possible, the effects that gelsemium has upon malaria. After an observation of a number of years, during which time I have probably administered the remedy to many hundreds of cases, I have arrived at the following conclusions: First, gelsemium is not a direct antidote either chemically or physiologically to malaria; second, it does have a wonderful effect over the disease,

owing to the relaxing influence it brings to bear upon the system, thereby increasing excretion, and assisting to eliminate morbific matters.

Third, I regard it as the great adjuvant of the salts of cinchona. In this respect, in my estimation, it nowhere has its equal; and in this direction, so far as malaria is concerned, lies its chief merit. In looking over my notebook, I find record of a case which came under my observation in the year 1873, in the city of St. Louis, and which fully illustrates this action. S. C., age 45 years; occupation, sign-painter; bilious temperament; sallow complexion; melancholy expression of countenance; said he had been afflicted with ague at intervals of a few weeks for some three years; had taken medicine from many physicians; had tried to take the various salts of cinchona, but the smallest amount produced such terrible cerebral symptoms that he now declared positively he would rather suffer with the disease than undergo the terrible agony produced by the quinine. He called upon me for treatment, and after he had given me a history of his case, I attempted to explain to him that I could administer the quinine in such a way as to prevent the usual unpleasant effects; but it was of no avail, he refused treatment. In a few days he was seized with a terrible paroxysm, simulating the congestive form. He, however, came out of this safely, but was again in forty-eight hours prostrated with another attack. A messenger came hurriedly for me, saying that Mr. C. was dying. I found him partially unconscious, in a congestive chill. After three hours of hard work, with diligent use of stimulants, external heat, etc., I succeeded in arousing him, and reaction began. During the febrile stage, I gave freely the fluid extract of gelsemium till I had reduced the temperature to the normal standard, and produced symptoms denoting the full effects of the remedy. To accomplish this, I gave for the first six hours three drops every hour, and afterward continued two drops an hour for twelve hours longer. At the end of this time, the patient being thoroughly under my control, or rather under the control of the medicine, and willing to take anything rather than risk dying in the third paroxysm, I immediately began the administration of sulphate of quinine, and gave ten grains every two hours till I had given 120 grains. I

then ceased and awaited results. It is needless for me to say there was no return of the disease. The patient was pleased; he had tried for years to take quinine, but could not endure its action. In the present instance, not a symptom of tinnitus aurium was manifested, and no other unpleasant symptom was noticeable. This is only one of a number of cases which now occur to my mind, in which I have seen gelsemium used to prepare the system for the action of quinine, where previously it was known to have a deleterious effect. That gelsemium is at all curative of malarial diseases, in the sense that quinine is, I do not believe; and yet I have observed that many so-called chronic cases, where the liver, kidneys, and entire excretory apparatus was torpid, were benefited or cured by this remedy. Its action in this direction, as I have before stated, I attribute to its influence over excretion, thereby enabling nature to throw off the disease through the natural channels.

In convulsive diseases, particularly those where the spasm is dependent upon reflex irritation, I know of no remedy that so satisfactorily fulfils the indications. In my own practice the most favorable results have been obtained in this direction in the various diseases of childhood in which convulsions are manifested. Children, as we all know, from a sensitive condition of the spinal centers and increased reflex irritability, are more liable to convulsions than adults. To quiet this irritation, knowing the action of gelsemium on the motor centers, we would naturally select it as the remedy *par excellence*. Such it has always proved itself to be in my hands. I have a number of cases recorded on my notebook to illustrate this action, but to mention one will be sufficient. Willie S., aged 8 months, was fed by his nurse for supper, milk and mashed potatoes. He had often been given the same diet for supper without deleterious results. On this occasion, however, as was afterwards discovered, the potatoes were not sound, and contained numerous hard lumps, which, when swallowed, the stomach was unable to digest. Consequently the child was thrown into convulsions. In one hour after this meal, spasms made their appearance. I was sent for, but did not reach the patient till about three hours after the beginning of the attack. During this time, according to the statements of the attendants,

there had been twenty or more convulsions; this would be one in less than each ten minutes. As I entered the room the child was just relaxing from the last paroxysm. I immediately gave two drops of fluid extract, and in ten minutes two drops more. I then added ten drops of the fluid extract of gelsemium to four ounces of water, and ordered a teaspoonful of the mixture to be given every hour for twelve hours. No more convulsions appeared, and the next day the child was convalescent. Upon the whole, I think there is no remedy that has such a satisfactory effect on the nervous system of the child during the period of dentition, when the entire system is disturbed from irritation of the distal extremities of the fifth pair of nerves.

As a remedy for *meningeal inflammation*, both of the brain and spinal cord, I regard it as of great value. Some ten or twelve years ago, when cerebro-spinal meningitis prevailed more extensively over the country than at present, a number of cases came under my observation, all of which I treated with the remedy. I remember distinctly a case which serves to illustrate not only the efficacy of gelsemium in cerebro-spinal fever, but also the large amount of the remedy that may be borne when the nerve centers are irritated, or inflamed. I have no notes of this case, but write from memory. The patient was an intimate friend of mine, a medical student. When I was called to his bedside, the case had already progressed four days; his temperature was high; pulse rapid and small; tongue dry; mind wandering, and there was severe spinal tenderness. The slightest disturbance in the room, or jar of the bed, resulted in severe convulsions accompanied by opisthotonos. This occurred once or twice an hour. He had been given bromide of potassium to a large amount without apparent benefit. I immediately began the administration of gelsemium; and gave the fluid extract five drops an hour till I had given three doses, at which time another convulsion appeared. I then gave ten drops an hour; and in three hours there were slight symptons of another convulsion. I then administered twelve drops an hour; and gradually increased to fifteen, before there was entire relaxation and disappearance of all convulsive action. This dose was maintained for several hours, and then, as toxic symptoms began to be manifested, the dose was diminished.

He was kept under the influence of small doses for a week or more, and finally recovered. He was living when I last heard from him about three years ago, and was practicing medicine somewhere in the State of Michigan.

Gelsemium has been reported as used successfully in a number of cases of tetanus, but my own experience with it in this disease has been such as convinced me that it is of but little, if any use, in the tetanic condition. It has no effect, in itself, over epilepsy; but when used with the bromides it apparently intensifies the action of the latter. This action I have verified a number of times in cases of epilepsy confined to children. After using the bromides for some time without much apparent benefit, the gelsemium was added, and the desired result was more immediate and permanent. A number of observers have spoken of the remedy as one of great value in tic-douloureux, neuralgia of the fifth pair of nerves. My own experience with it in this direction is not encouraging. I have used it in a very few cases with apparent success, but my failures have far outnumbered my successful cases. How it ever gained a reputation for this form of neuralgia, I am at a loss to understand. It is possible that the successful cases were not those of tic-douleureux, but of neuralgia from cold, or from some other excentric causes producing congestion, which we may readily understand would be more liable to be relieved by this remedy.

Gelsemium may be used successfully in many of the acute inflammatory diseases. By lowering the temperature, and lessening the pulse rate, its natural tendency would be to lessen or retard the inflammatory action. I have used it in many cases of pneumonia and pleurisy with beneficial results. By its action over the heart it lessens the liability to pulmonary congestion, has a soothing effect over the respiratory function, and lessens the cough, thus giving rest to the affected organ, conditions which can be readily seen to be essential to a rapid recovery.

Gelsemium has a marked effect over the mucous surfaces. This I have seen frequently demonstrated by using it in gastro-intestinal catarrh, dysentery, and inflammatory conditions of the urinary organs. I have used it successfully in many cases to allay vesical irritability. Dr. Edward Mayer—*Hints on Specific*

Medication—recommends it highly in irritation of the bladder and posterior portion of the urethra. Where there was a marked irritability in this region, I have used it to successfully check nocturnal emissions; and found it a valuable remedy in chordee. Dr. Mayer also mentions this fact, that cases of enuresis, both infantile and senile, have been cured by gelsemium when belladonna had entirely failed.

Another application of gelsemium to which I wish to invite attention, came under my notice some twelve years ago. I was in Eastern Kansas, and my attention was called to quite a number of rattle-snake bites. The prairie rattle-snakes were numerous, and people were frequently bitten, many of the cases occurring among small children. The symptoms were always violent, and occasionally a death followed. Noticing the high inflammatory condition and frequent convulsions that followed the bite, I reasoned that gelsemium might prove an efficient antidote. I immediately began its administration, and must confess that no other remedy in my hands has ever yielded such results. The local inflammation and pain rapidly subsides, and convulsions cease in a short time after the first few doses. I had an opportunity to notice the effect of gelsemium in a number of these cases, and have also had favorable reports from several physicians to whom I suggested this plan of treatment. I not only gave the medicine internally, but had it applied locally. In these cases I regard its action as entirely physiological, and not chemical. The use of gelsemium in rattle-snake bites was first suggested to me by my father, Dr. Geo. W. Davis, of Foster, Bates county, Missouri.

Diseases of Women.—Another application of this remedy, and one which may be considered equal to, if not greater in importance than, all others, is that which relates to the pelvic disorders of women and their attendant nervous disturbances. This declaration may apply with equal force to both the acute and chronic states. The relaxing effect which it possesses over the uterus and its appendages, is something remarkable. In the first stage of labor, when the pains are of that peculiar short, sharp, and irritating nature, which is so exhausting to the patient and wearying to the patience of the physician, a few drops of the

remedy will immediately change the features of the case, the pains assuming a more steady and expulsive nature. When, owing to a hard, rigid, and unyielding os, the labor is delayed from hour to hour, a similar administration will immediately produce relaxation, and permit the labor to proceed without interruption. In many forms of dysmenorrhœa its beneficial effects are equally noticeable, but to produce a more satisfactory result in these cases it should be administered for a month or two daily. By keeping the system thus for some time thoroughly under its influence, the pelvic circulation becomes more free, all congestive symptoms seem to disappear, the uterus and its appendages are relaxed, and, being freed from the tense and rigid condition which usually prevails in these conditions, menstruation becomes free and painless.

But I wish more especially to call attention to the action of gelsemium in those diseases of women which have assumed more or less of a chronic form, and in which, from a long continued condition of congestion, irritation, and perhaps inflammation of the pelvic viscera, the nerve centers have become so disturbed that the disease is finally classified under the head of the "neuroses." Possibly no class of patients suffer more from incorrect medication than these. Surely there is none concerning which there is so wide a diversity of opinion regarding the diagnosis of individual cases and the medication to be employed to remove the disease.

After we have read the various conflicting pages of authority on this subject till the mind is confused in the attempt to come to a correct understanding of the pathological conditions which distinguish the various phases of hyperæmia and anæmia of the spinal cord, or the same conditions confined to the anterior or posterior columns and the base of the brain, hysteria, spinal irritation, neurasthenia, and the various mental phenomena which approach the borders of insanity; after we have taken a survey of the entire armamentarium which the medical world has stored up for this purpose, including phosphorus, strychnine, iron, the bromides, electricity, and that much abused nineteenth century method, "local treatment," we are ready to close our eyes. We can easily imagine before us the helpless form of woman, piteously

and vainly extending her hands for help. Now, while I do not claim to have discovered a never failing remedy—a panacea—for all these conditions, yet I do hold that a large number of the diseases of females can be relieved, benefited, or cured by this remedy. I reason that in the most of them there is an inefficiency or unequal distribution of nerve force, and consequently an unequal distribution of blood supply. The nerve centers being stimulated to a correct performance of their functions, there follows an equal and normal supply of blood.

Gelsemium has an apparent two-fold action on the spinal cord. When given in minute quantities and long continued, it stimulates, gives tone and elaborates nerve force, while the opposite effect is produced if the dose is sufficiently increased. This apparently dual mode of action may be considered simply as different degrees of the same action, and not as an illustration of the homœopathic idea of infinitesimal action, or a verification of the theory of *similia similibus curantur*. No more rational explanation of this mode of action can be given than that explaining the way in which small doses of ipecac lessen the irritability of the gastric mucous membrane, and in this way check vomiting; or in which strychnia in small quantities is used to control some forms of convulsion. Prof. Ringer has satisfactorily demonstrated this primary stimulating action of the article by noting its effect in some of the lower animals on the third pair of nerves. By a series of carefully conducted experiments, he shows conclusively that whether given internally, or applied topically, contraction of the pupil invariably precedes dilatation, thereby proving that its first effect is that of stimulation. After having administered it for a number of years I am now prepared to positively assert that gelsemium is a stimulant, or perhaps I might say tonic, to the cerebro-spinal system when long continued in small quantities. It has yielded the best results in the nervous diseases of women, in connection with many disarrangements of the pelvic viscera. I am inclined to believe that more of these diseases located in the pelvic cavity are due directly to a depressed condition of nervous force, than is generally admitted by the profession to-day, and instead of the local trouble being the cause of the nervous disturbance, the reverse is true. It is this class

of cases in which I would most earnestly recommend the long continued use of gelsemium in minute doses. Perhaps a better illustration of this application of the remedy may be given by reciting the history of three cases:

CASE FIRST.—Mrs. I. S. came under my care five years ago; age 35 years; mother of four children, youngest fourteen years old. When I was called to her, she was confined to her bed, and had not taken a step without assistance for five weeks. She was weak, despondent, very nervous, and subject to severe neuralgic attacks in various parts of the body. Examination revealed a tense, swollen condition of the uterus and also much peri-uterine congestion and inflammation. In the region of the right ovary was a large swelling, which was easily recognizable through the walls of the abdomen, and which her medical attendant had designated as a tumor. Her history was the usual history of such cases. Two years before she had felt that her health was giving way. She was languid, tired in mind and body, and seeking counsel from her physician, was told she had ulceration of the womb and must have local treatment. She had it, changed physicians and had it again, and continued to have the same treatment from each physician to whom she applied, varied slightly according to his fancy, or as to whether his diagnosis was ulceration, endocervicitis, retroflexion, retroversion, ovaritis, or peri-uterine inflammation, spinal irritation, etc. Menstruation had for a number of months been growing less, till now, at each period it amounted to only a few drops, or did not appear at all. There were also slight rheumatic symptoms in various parts of the body. Here was a disturbed condition of the nervous system which I believed could be removed by the administration of gelsemium. I immediately began to give it, my prescription being:

℞ Ex. gelsemii Fl.....gtt.j
Aquæ.....fl ℥ii
Teaspoonful three times a day.

The dose was gradually increased till in a month she was taking one-fourth of a drop, and in two months one-half of a drop three times a day. The patient gained gradually in strength, all of the functions of the body being gradually restored, menstruation increased with each period, and at the end of the sixth

month was perfect; and the enlargement in the region of the left ovary had entirely disappeared, as also had all symptoms of uterine congestion and inflammation. In eighteen months after the beginning of the treatment she gave birth to a perfectly healthy child. Since that time her health has been perfect.

CASE SECOND.—Mrs. L. S., aged 45, came under my professional care in 1878. She had been in bad health for ten years. She gave a decidedly neurotic history, several members of the family having had insane symptoms. She herself had frequent attacks of severe neuralgia. She was melancholy, dizzy, felt exhausted on the slightest exertion, and complained of a feeling of numbness over the left lateral half of the body, which was increased at the menstrual period. This condition of hemi-anæsthesia was undoubtedly hysterical, and not due to any cerebral lesion. Ovarian tenderness was more perceptible over the left ovary. The bowels were constipated; micturition was frequent. On walking there was much bearing down in the back and lower abdomen. Examination revealed ovarian tenderness; the uterus appeared enlarged and retroverted. Menstruation had been very irregular for several months, sometimes not appearing for two months. She suffered severely with dysmenorrhœa; had been married twenty years but had never been pregnant. She had received a great deal of local treatment, and worn a number of pessaries of different kinds. Her physician had attributed her entire trouble to ovarian and uterine disease. I began the administration of gelsemium in doses of one-sixteenth of a drop, and gradually increased to half a drop three times a day. Her improvement was gradual but continuous. In three months her strength had much increased. The hemi-anæthæsia had almost disappeared. She was much more cheerful in disposition. Menstruation had appeared regularly, and was entirely painless and much increased in quantity. In six months all symptoms of ovarian or uterine inflammation had entirely disappeared, and she appeared well, with the exception of not having yet arrived at her normal standard of strength. Much exertion produced unnatural fatigue. I advised a continuance of the remedy. About that time she changed her residence to Michigan. In about three months she came across the lake one stormy day, and

called on me at my office full of anxiety and fear at what she termed her "strange feelings." Menstruation had not appeared for two months, she was nauseated, vomited frequently, and felt, as she expressed it, "so very strangely," such feelings she had never had before. She was fearful of an attack of paralysis. I made an examination, and found her pregnant. At this her alarm was greatly increased, and she pleaded piteously that I would again establish menstruation, declaring that as she had never been pregnant, and was now 45 years old, it would be certain death for her to attempt to bring a child into the world. I quieted her fears, gave small doses of oxalate of cerium and subnitrate of bismuth, and had her return home and write me every few days her condition. She continued to do well during the entire period of utero-gestation, and on the day of the birth I received a telegram, "wife and son doing well." A few months ago she called on me, and was leading a beautiful five-year-old boy by the hand. This was a remarkable case, not only for the removal of the pathological condition, but that menstruation should return and pregnancy occur at the age of forty-five years.

CASE THIRD.—Mrs. G. B., aged 46, consulted me June 18, 1880. Her case presented a number of interesting features, and was remarkable for the extremely low state to which the general system had been reduced, and the variety of diagnoses which had been given by medical gentlemen. For eight years there had been an apparent decline of health, and at the same time a perceptible loss of flesh, till at the time of her consulting me the weight was reduced to seventy-five and one-half pounds.

Five years previously she had suffered from an attack of typhoid fever of five weeks' duration, and since that time had been treated for sciatica, bronchitis, ulceration of the intestinal canal, disease of the pyloric orifice of stomach, cirrhosis of the liver, diseased kidneys, hyperæmia of the brain, and last but not least, the various flexions, versions, and inflammations of the uterus. She was a lady of unusual intelligence, and beyond the mere desire to recover, manifested a scientific interest in her own case, and had kept a careful record of opinions which had been given her by medical men concerning her condition. This recording of medical opinions seemed to have grown almost to a monomania

with her, and no sooner had I finished my examination than she took out pencil and paper, and enquired, "and now, doctor, what is your diagnosis?" I facetiously replied that as there was no room to make a new diagnosis, I would simply say that she was ill. Her case presented symptoms which indicated a general failure of nutrition. As before stated, at the time of beginning treatment she only weighed seventy-five and one-half pounds. Her symptoms were restlessness, inability to sit still, easily worried, frequent attacks of neuralgia, sleeplessness, depression of spirits, pressure on the top of the head, spinal tenderness, more marked over spinal processes of the third and fourth dorsal vertebræ, constipation, and a very feeble condition of digestion, with frequent acid eructations. She complained much of back-ache, and heavy dragging sensation around the loins, but examination revealed but slight engorgement of the uterus and ovaries. Menstruation had been very scant, and irregular for two or three years, and had not appeared since November preceding, seven months before. I immediately recognized in this case a condition of deficient and irregular supply of nerve force, and prescribed:

℞ Ex. gelsem. Fl..... .....gtt.j
Aquæ..... ℥ii
M. Teaspoonful three (3) times a day.

She began to improve almost immediately. I increased the dose in one month to double the amount. The digestive organs resumed their natural function, the nervous system became quieted, sleep was more prolonged and natural, and at the third month menstruation reappeared, much to her surprise, and somewhat to my own, as she appeared to have approached the menopause. In October, four months from the beginning of the treatment, she weighed ninety-five and one-half pounds, indicating a gain of just twenty pounds. I gradually increased the dose of medicine till I had reached one-fourth of a drop, when the patient declared she felt the effects of each dose in the eyes half an hour after taking, when I reduced the quantity to one-eighth, at which I continued for about four months longer, when her health seemed to be perfect. She removed to the city of Philadelphia, and I did not see her for a year, at which time she

called and appeared in excellent condition of mind and body. About four months ago, when passing through the city, she called at my office, and still reported good health. She has had altogether a gain of thirty-five pounds since the beginning of the treatment, and menstruation still continues at the age of almost fifty years.

These cases are illustrative of a large number in which I have used gelsemium in small doses, with equally beneficial results. Whether the influence this remedy has over the pelvic viscera is due directly to an impression on the spinal cord, or upon the sympathetic ganglia, is a matter of some question; but it is highly probable that it has a tonic effect on the sympathetic ganglia as well as the cerebro-spinal centers. The action of gelsemium over the disorders peculiar to woman, I regard as a subject of great importance, and well worthy the attention of the profession. On no subject of diseases is there so great a diversity of opinion as here, and in no branch of medicine is there so great a demand for improvement in therapeutics. We bow with respect in the presence of those who in past years have formulated theories in regard to these diseases. Each age can read only by the light admitted to the altitude at which it stands. Looking back over the history of gynæcology with all the light of to-day and yesterday thrown upon it, can we refuse to acknowledge that a large number—a very large number—of the diseases in its field arise from a disturbed or depressed condition of the nervous system? We are living in a nervous age, and our spurious civilization rests heavily upon us. Dr. T. Gaillard Thomas, in speaking of woman and her diseases says, "The customs of civilized life have depreciated her powers of endurance and capacity for resisting disease." In the year 1850, Dr. Tilt, of London, affirmed that "as a rule, pelvic diseases of women radiate from morbid ovulation." Can it be wondered at, when the nervous system, the seat of nearly all the vital forces, is shattered, that nature should make an attempt to cut off the supply of sickly offspring by disturbing ovulation? This position of Dr. Tilt has been denied by many, but undoubtedly it contains the germs of truth. To-day I would go beyond this, and say that a large number—a very large number—of the pelvic disorders of women

arise from a disturbed condition of the nervous system, which in turn produces morbid ovulation. It is in this way that I account for the action of gelsemium over these disorders. Its action is directly on the nerve centers—spinal and sympathetic, equalizing the circulation, giving tone to cell-power, by these means permitting free ovulation, and so relieving the congested and inflamed condition of the other pelvic viscera. If this be true, if it does have the action illustrated by the cases I have cited, I propound the question, may it not also be considered a remedy for sterility?

A NEW METHOD IN ADHERENT PLACENTA.

The New York *Medical Record*, May 17, 1884, alludes to a report in the *Clinique*, by Dr. J. Feld, of Kansas City, on "A New Method in Adherent Placenta." In six cases of adherent placenta, the life of the woman was saved by pumping cold water through the umbilical cord.

Although the *Record* is profoundly in error, in its denomination of the method as a new one, it deserves credit for calling attention to a very old and very excellent procedure. The injection of cold water into the umbilical vein, in *post-partum* hæmorrhage and adherent placenta, was ably advocated and extensively practiced by Mojon (1826), Kilian, and others.

The umbilical vein is divided transversely, a tube or quill fastened securely in the proximal extremity, and cold water injected, slowly and carefully, into the placenta, by means of an ordinary syringe. The cold water, forcing its way into the placenta, distends that organ to twice its original volume, escaping through the lacerated utero-placental vessels, bathes the endometrium, and stimulates the uterus to powerful contractions, usually resulting in the total separation and spontaneous expulsion of the afterbirth. Stoltz and Rombach (1855) have extolled most highly this measure, while Linéard (1875) claimed that the injection of 150 grammes of pure cold water into the umbilical vein was "the best, most reliable, and least dangerous expedient in all cases of *post-partum* hæmorrhage, or adherent placenta."

At present this method is extensively practiced in Germany, more particularly in Bavaria. Scanzoni, in Würzburg, practices this method exclusively. W. W. JAGGARD, M. D.

May 26, 1884.

Society Reports.

AT THE CHICAGO MEDICAL SOCIETY.

Regular meeting of March 17, 1884.

The following important topics were discussed, regarding operative surgery pertaining to the nervous system, namely:

I.–Suture of Nerves. II.–Elongation of Nerves. III.–Exploration of the Brain by the Hollow Needle. The above selections appeared in a paper, prepared by Dr. Roswell Park, of Buffalo, N.Y., wherein he has deduced a number of interesting conclusions, a synopsis of which is hereby appended, furnished by the Secretary, who read the paper for the author (unavoidably absent).

We read* that Gillaume de Salicet, Lisfranc, Guy de Chauliac, and others, recommended the suture of divided nerves. But when we remember that nerves and tendons were often confounded in those days, this interesting item loses part of its importance. In 1776, Cruikshank demonstrated the possibility of cicatrization of nerves; after him Fontana proved this cicatricial substance to consist more or less of true nerve tissue, and recommended its union by suture, when divided, a procedure further advised by Dupuytren.

But the first to actually practice it as a physiological experiment on human patients were Baudens, Laugier, and Nelaton; the two latter having each within a single week, in 1864, a case which each for his own part reported.† It happened very curiously that in each of these cases it was claimed that sensibility and motility had returned within 24 hours after operation. This

* International Encyclopedia of Surgery, III, 621.
† Comptes rendus, 1864. No. 25.

seemed incredible, and Richet* cleared up the matter by reporting a case. This author claimed, and properly, that a similar state of affairs had obtained in those cases in which Laugier and Nelaton had claimed such surprising results, and that they had not accurately studied their cases before operating. Since that time the subject has been studied experimentally and clinically, until now the indications to the surgeon are perfectly clear. In the literature on this subject may be found among others the views of Arloing and Tripier, Langerfeldt, Lemke, Kraussold, Page, Brown-Sequard, Tillmanns, Nicaise, and Holmes. The exact number of all cases recorded to date, as nearly as the writer can estimate, is thirty, nearly all of which have been successful. To these, he would add two more never yet reported, some features of the operation.

CASE I.—*Rupture of the Sciatic Nerve—Immediate Union—Restoration of Function.* H. H., æt. 13. In 1881 the surgeon excised the hip joint of this patient (who was then 11 years of age), for long-standing and extensive disease. He made a good recovery from a severe operation. In time sinuses burrowed in the region of the buttocks, along with other evidence of new and extensive disease, and Feb. 9, 1883, radical operative measures to remove the disease were again undertaken, the patient being admitted to the Michael Reese Hospital, Chicago. He was assisted by Drs. Lackner, Tracy, and McAuliffe, and proceeded first to explore the parts. He found caries of the tuberosity and other parts of the ischium, sinuses leading inside the pelvic cavity and around the rectum. In brief, aggravated tuberculous disease of the bony pelvis and contents was present. In order to secure access to the parts, and to permit the necessary freedom of manipulation, a flap composed of the buttocks had to be laid up on that side, owing to the cicatrization following the previous operation and the present local disease and induration. The sheath of the sciatic nerve had contracted firm adhesions to the overlying parts. The nerve was unmistakable, but the tissue was in the way. So one of the gentlemen present undertook to hold up the flap with a powerful retractor, while the operator dissected the tissues from the nerve. Being short of sufficient assistance,

Union Med., 1867, p. 444; *Gaz. des Hôpitaux* 1867, p. 519 *et seq.*

the patient inadvertently was permitted to so far recover from his chloroform that he gave a violent wrench and turned partially around, when it was discovered that the nerve had been torn completely through; the ends, while not exactly ragged, being anything but smooth. The ends were dissected free, and the operation proceeded with as had been originally contemplated, *i.e.*, by resection of a good portion of the ischium, scraping out of the sinuses leading into the pelvis, inserting drainage tubes, etc., after which the nerve-ends were united, first snipping them off evenly with scissors, and then sutured as accurately as possible by two catgut threads passed entirely through the nerve-trunk and about a quarter of an inch from the line of section. After this the soft parts were closed as usual. Proper provision was made for drainage, and a Lister dressing applied, the whole having been done under the carbolic spray.

For about a week there was absolute paralysis of sensation and motion throughout the region supplied by the great sciatic. Thirteen days after operating there was but a small area of integument near the external malleolus which was not sensitive as usual, while he could move his leg as well as before the operation, and judging by his progress, regeneration was practically complete in a day or two more.

CASE II. *Division of Radial Nerve and Certain Tendons; Suture of Same after Two Weeks—Restoration of Function.* C. D. G., aged 16. April 1, 1883, patient cut his right wrist with a cheese knife in a way that severed the radial nerve and artery, and the extensor ossis metacarpi pollicis and extensor primi internodii pollicis. The physician who saw him at the time of the accident contented himself with checking the hæmorrhage. At the Reese Hospital, Chicago, on the 16th, the following condition was noted: Hand dropped to the ulnar side, with sensibility of those parts supplied by the radial nerve, extremely impaired, and, indeed, in the central portion of that area practically lost.

After anæsthetizing him and dissecting down upon the parts, found the tendon ends retracted within their sheaths, so as to be an inch apart; opened the sheaths and carefully united the ten-

dons by catgut suture, and their sheaths over them by interrupted sutures of the same material. Then the ends of the radial nerve were found, and freshened and brought together by a single catgut thread. Over all, iodoform dressings. By May 5, sensation was restored to the areas supplied by the radial nerve; by the 25th, it was evident that the tendons had firmly re-united, and, except as limited by partial adhesions in their sheaths, were capable of re-assuming their functions. In course of time these adhesions became stretched, and the hand became very nearly as useful as before.

Commentary. Suture of nerves is known as *direct* when the suture material is passed directly through the nerve trunk, and as *indirect* when only the nerve sheath is included; the former is usually preferable. There is fair prospect of success, even months after the original injury, as witness the case in which Wheelhouse* united the sciatic fully nine months after the accident which severed it, the patient in four months more being able to do all manner of hard work; while Jessop, according to Tillmanns,† has recently operated *nine years* after the injury and with fair success. Nevertheless, the sooner it is done, the better, and the quicker will be the result.

If on dissection the nerve ends prove to be clean cut (in recent cases) they need no further attention before uniting them, and the ordinary full curved surgical needle will suffice for the operation, taking care to insert and pass it flat-wise between the bundle of nerve fibers until the broader cutting part is through, and then to turn the needle half round and let the carbolized cat-gut slip through the little slit. It may be necessary to introduce two or three sutures, especially in the larger trunks. Avoid tension of the limb. The part must be dressed accordingly, and immobilized. Observe full antiseptic measures. Evidently primary union is only such in appearance. It is cicatricial, not physiological. *Immediate suture does not prevent degeneration, but simply permits regeneration to take place* much more rapidly than it otherwise would. But *immediate union of divided nerve tissue does not occur.* Letiévant has suggested autoplastic operations

* *Brit. Med. Jour.*, Aug. 5, 1876.
† Loc. cit., Case II.

on nerves, and Gluck, in 1882, at the Congress of German Surgeons, reported some astonishing successes in neuroplasty by transplantation. While the writer has not as yet performed this operation, he would not hesitate to make the experiment of transplanting nerve from some animal into a patient, did a suitable case present.

It may be well to add, no case yet known has had neuritis or tetanus, or have any untoward consequences resulted from this sort of surgery of the nerves. The operation deserves much more cordial recognition and acceptance than it has as yet received.

II. *Elongation of Nerves.*

Upon this portion of the paper, the writer dwelt considerably upon the literature, and many were the authorities quoted. Its application has apparently, therefore, not been restricted to neuralgia and contractures, but has been extended to anæsthesia and paralysis, great atrophy, convulsive affections, to tetanus, locomotor ataxia, and even to anæsthetic leprosy, etc.

To Nussbaum (says the writer) we owe a debt of gratitude for making the way clear and first putting "nerve-stretching" into practice. While resecting an elbow in 1860, his assistant accidentally but forcibly stretched the ulnar nerve, and it was noticed the tetanic cramp, with which the arm was previously affected, totally disappeared, which made a strong impression on his mind. In 1869, it happened that Bilroth had a patient who had received a violent contusion of the buttock, and subsequently developed epileptiform paroxysms. Under the impression that there was nerve irritation from some bone splinter, he denuded the nerve without finding anything wrong, but the nerve had been disturbed and more or less stretched, and recovery followed. Acting on these hints, Nussbaum for the first time practiced intentional elongation in 1872, the case being one of contracture of the upper extremity, consecutive to contusion. Recovery followed the operation. Without discussing the general merits of the operation, or the statistics, or extent of stretching that nerves will bear, nor yet the changes resulting therefrom other than clinical results obtained, we will be content in making synopsis of the five cases reported by the writer, that have not heretofore been placed on

record, in three of which elongation was made on purely empirical grounds, and merely as physiological experiments.

CASE I. *Chronic Sciatica—Elongation—Recovery.*—W. L., aged 25, has suffered severely from sciatica for some five months; has lost considerable flesh; has been all this time under medical care, and for the last six weeks in the County Hospital, Chicago. A most varied internal treatment has been resorted to, as well as the use of electricity, part of the time intelligently applied. Patient was admitted into the Michael Reese Hospital, Chicago, and on June 15, 1883, he was anæsthetized, and the sciatic nerve of the affected side was stretched. The operation was made under the spray. By the 20th, when the dressings were changed. the wound was found to have healed per primam; pain was relieved at once, and at this date sensation and motion were found to be nearly normal. There was now and then a twinge during the next month.

July 20, when he was discharged, he simply noticed an occasional pain in one small spot in the calf of the leg.

September 1, he called to say he was perfectly well.

CASE II. *Toy Pistol Tetanus—Elongation of Brachial Plexus—Amelioration of Symptoms.*—A. G., aged 10. On the 4th of July, 1883, patient injured his left hand with a toy-pistol. On the 11th, at 4 A. M., he developed the first symptoms of tetanus. He was at once brought to the Michael Reese Hospital. Saw him at 11:30 A. M.; at that time there was moderate clonic spasm of the muscles of back of neck, with tonic exacerbations; found a suppurating wound in palm of left hand. The patient was anæsthetized; operated under the spray. The palmar wound opened, I found it foul and containing a piece of wadding, which was removed, and the cavity scraped. An incision along the inner border of the biceps brachii was made, the nerves isolated and stretched in each direction, including the median, ulnar, and internal cutaneous nerves, and that of Wrisberg. Wound was closed over a small drainage tube, and iodoform dressings applied. The patient improved decidedly after this procedure. Squibbs' ext. physostig. gr. 1-15 hypodermically every two hours; also sodii bromid. gr. x. every two hours, and chloroform inhalations

during any tetanic seizures. Evening condition very satisfactory. Next morning about 7 o'clock he complained of pain about the heart, and died within an hour, apparently from spasm of the diaphragm. Autopsy not allowed.

CASE III. *Motor Paralysis of Right Leg, following Spinal Meningitis—Elongation of Sciatic Nerve—Negative Result.* A. K., aged 40, in July, 1881, was seriously ill, probably a spinal meningitis. At present he suffers from mono-plegia, the right lower extremity being the part involved. Has been under the care of several physicians, and recently a patient in the medical department of the Michael Reese Hospital, where, along with electricity, various other remedies were tried. Elongation of the sciatic as an experiment was proposed; patient accepted it *as such*. September 15, 1882, operation under the spray. The limb was suspended by the nerve, and stretched from above downward, and *vice versa*. Heart's action momentarily disturbed. Union *per primam*.

October 17, patient acknowledged perceptible improvement. Very little further improvement was made in several weeks longer that he remained in the hospital.

CASES IV. AND V. *Parœsthesia and Dysœsthesia of Unknown Origin—Elongation of Sciatic, and Later of Crural Nerves—No Result.* H. K., aged 32, has suffered fourteen years from perverted sensations, causalgia, etc., referred to integument of lower extremities, especially the right one. Of late complains of a feeling of intense cold, referred particularly to the area of distribution of the right sciatic and peroneal nerves. His intelligence is not of high order. Patient has been under the observation of Dr. Ernst Schmidt for years, who finally suggested *elongation* as a pure experiment, and admitted him to the Michael Reese Hospital, June 22, 1883. Sciatic and pero neal nerves were stretched, with the usual precautions. July 1, no improvement, and at patient's urgent request the anterior crural was stretched, and yet no benefit seemed to accrue. Each time the nerve was stretched downward in this case, and also an irregularity of the heart's action occurred for a few seconds.

Commentary. Case I exhibits the happy effects to be obtained in obstinate cases of sciatica resisting medication. The operation has a wide sphere of usefulness in this form of complaint, of which not a few cases are already on record.

Case II exhibits at least the temporary relief to be obtained by this measure in cases of tetanus. That we cannot afford to reject this method of treatment, for amelioration of symptoms is better than no impression at all, although in this case an error may have been committed in omitting also to stretch the musculospiral nerve; possibly too much sedative treatment was given the patient, and not sufficient stimulating nourishment; a not infrequent mistake.

Cases III, IV, and V were undertaken, as already remarked, on *purely experimental grounds,* and the patients accepted it as such; they further go to prove that we usually learn more by our failures than from our successes.

III—*Exploration of the Brain by the Hollow Needle.*

There is no *special literature* on this subject. To illustrate the ease with which it may be done, and its harmlessness, the author cited the following cases:

Case I—Gunshot Wound of Brain—Trephining—Repeated Exploration for Pus—Extrusion of Fragment of Bone—Recovery. J. L., age 20, on the afternoon of July 4, 1883, received a bullet-wound of the left parietal eminence; brought to the Michael Reese Hospital. The house-surgeon abstained from exploring the wound, but clipped the hair short and made antiseptic occlusion with iodoform cotton, also applied ice-bags. At evening there was complete right hemiplegia; pulse 90; pupils normal; patient conscious and rational; continued the ice-cap and gave directions to use catheter.

Next morning learned of patient having two convulsions during the night; he also lost consciousness; pupils normal, and respiration natural.

Exploration under the spray revealed a comminuted gunshot fracture; trephined; removed several small fragments, some of which were partially imbedded in the brain; removed also a

piece of the small pistol bullet. Compression was then made and dressings of napthaline gauze applied. For several days patient's condition was satisfactory, except that the hemiplegia persisted.

July 13—Answered questions rationally.

July 18—There was free discharge of pus.

July 20—Symptoms of cerebral irritation; fear of abscess forming; dressings removed; introduced a well-cleansed needle of a hypodermic syringe through the cicatricial tissue, explored in different directions by its full length, never completely withdrawing the needle point. No pus, and but a few drops of blood entered the barrel of the syringe. No anæsthetic was given, nor pain complained of; no unpleasant effect of any kind followed.

July 23—Has some control of right leg, but the arm was in a contracted condition.

July 26—Patient very fretful and irritable; discovered a hard substance under the integument; upon cutting down (without an anæsthetic), removed a piece of bone of the size of a silver half dime, and the full thickness of the skull. To be certain that no abscess was forming, exploration was again made with the hypodermic needle as before, and again with negative results.

July 28—Patient discharged, wearing a lead plate to repress a tendency to hernia cerebri.

August 3—Patient steadily improving and regaining the use of his arm.

Case II—Suspected Abscess of the Brain—Exploration. This case presents a humorous side. H. H., age 38; admitted to the Buffalo General Hospital during the first week in January of the present year. No accurate history elicited; patient had facial paralysis of right side of the face; gave a very indefinite history of suppurative trouble of right middle ear dating back for years. Had also further paretic symptoms in the limbs; incoordination of ordinary movements; incontinence of urine and feces; pupils unequal, but sensitive to light; pulse and temperature normal. He gave *no* history of convulsive seizures of any kind; syphilis denied.

January 7—Was summoned to a consultation concerning the

case; others present, Drs. Wyckoff, Rochester and Gay. For several hours patient had been comatose, pulse had been as low as 48, and his general appearance was as of one suffering from compression of the brain. Bearing in mind the trouble in his middle ear, and the other part of the history of the case, an abscess of the right side of the brain, or a collection of pus in that neighborhood was suspected, and exploration was resorted to over the mastoid region, first trephining high enough to escape the lateral sinus. The longest needle of a hypodermic was then used, passing it inward, upward, downward, backward and forward, getting thereby only a few drops of blood. Wound was irrigated with sublimate solution, closed over a drainage tube, and a napthaline dressing applied; spray not used; very little ether required. The succeeding day, January 8, patient perfectly conscious. In short, this had been an epileptic seizure.

Janury 16—Wound perfectly healed over where the button of bone had been removed, and his general condition was improved.

February 5—Patient went home perceptibly better than when he entered.

Evidently here was an error in diagnosis, but an excusable one, as the man had not been in the hospital long enough to make a diagnosis possible, and where no history was obtainable, especially regarding his previous seizures. It is, moreover, obvious that the epilepsy in his case is secondary to some serious organic change, and a case of this kind, with its *post-mortem* revelations, was still fresh in the surgeon's mind, which possibly also influenced him unduly to operate. In spite of error, however, the patient was benefited rather than injured by the operation. Exploration of the brain, at least of its upper and enveloping portions by the hollow needle, is harmless, and it should find a recognized place both in our surgical practice and in our text-books.

The paper evoked considerable discussion, as may be seen from the following remarks:

In discussion, Dr. J. G. Kiernan said Johnson (a Norwegian physician) had experimented on suture of nerves in fowls, and reported that to do so by the direct method, it required 45 days

before the animal regained the normal function of the affected part, and 60 days when it was performed by the indirect method.

Regarding the second part of the paper—nerve-stretching—there is not much benefit to be derived from the operation, except in cases of neuralgia. The operation is not unattended with danger. During 1882, of 25 cases of locomotor ataxy reported where nerve-stretching was performed, five cases died from the operation. The same year, Graeme Hammond reported a case where the operation aggravated the disease. In a case of multiple cerebral sclerosis in which he was personally cognizant of the facts in the case, he reported the following result: The patient (a man) having previously been treated for a long time, visited an Eastern city and returned markedly improved. Upon inquiry, I was told by him that the posterior cord of the brachial plexus had been stretched. I examined the surface over the region of the clavicle. and at once saw that only the integument had been cut through. Now, here is a case of *imaginary improvement*, and the man really believes himself improved because, as he supposed and believed, the *real* operation had been done to relieve him. Regarding the case of tetanus reported in the paper, he did not think nerve-stretching was warranted after the source of irritation had been removed, the wound cleansed and dressed antiseptically, and the patient treated with physostigma. Regarding exploration of the brain, the speaker thought it an unjustifiable procedure, unless based on symptoms localizing the lesion in some portion of the brain.

Dr. J. J. M. Angear arose and debated the subject quite extensively. Regarding the vicarious action of nerves that the author alludes to, and their anastomoses, he did not fully understand. For it is a fundamental principle that nerves are continuous, and thought these words should not apply here, as we do to the circulatory system. Regarding the cases of suture of nerves of long standing the author speaks about, the speaker said, when a nerve is severed and does not at once heal, that nerve, or portion of it passes into fatty degeneration, and it is then no longer a nerve, and we might as well talk of restoring arteries after ligating them as of restoring nerve function after this manner.

To illustrate—We may have a painful stump after an amputa-

tion, and why? Because the ends of nerves supplying the parts have not passed through this degenerative process, but instead, little fibrous cords, or bulbs, or a tumor has formed, and oftentimes may require to be removed to relieve the increased sensibility. We do not have that immediate physiological action from suturing nerves—it takes weeks or many months before physiological action is established. With reference to elongation of nerves, great damage may be done in this procedure when this operation is performed. A surgeon (he doubts) never looks into the details or minutiæ, to see further about the nerve to be stretched, what is wrong, but proceeds to the stretching of it, and I very much doubt if peaceful, harmonious nerve action follows this operation, or at least in but one or two exceptions.

Exploration of the Brain.—This we cannot endorse as a society. If we operate on the cerebrum of a patient, fatal harm may result. I cannot see how it is the "harmless operation" the surgeon states it to be, and I think death more often occurs than beneficial results follow such procedures. Certainly there is great danger in probing the human brain, for a minute clot may form from a little hæmorrhage that may ensue.

Dr. G. C. Paoli: Let us admit, for the sake of argument, that suture of nerves and nerve-stretching will relieve suffering humanity. But no statistics that he knows of are yet published as to the percentage of successes. He does not doubt but that in a very few cases nerve-stretching may prove beneficial. We often admire the boldness of a surgeon, but what a surgeon does to-day he would, years ago, have been branded for as committing murder. Some of our colleagues who are old in the practice of their profession are, for like reasons perhaps, called "old fogies" because we do not go ahead and cut, but nature heals our cases and before long it may be that the operation of nerve-stretching will be performed in acute neuralgia, as it is now done to relieve the chronic forms of it. The operation for sciatica has been in vogue during the past ten or fifteen years, and does not always afford permanent relief.

Dr. D. A. K. Steele thought the discussion thus far had been quite severe in criticising the paper, and he thought immediate nerve suture to be justifiable; it should be done often where

only the integument is sutured. Nerve stretching, he thought, is useless in tetanus and locomotor ataxy, whereas in obstinate sciatica it cures, and is a justifiable operation. The last portion of the paper on "Exploration of the Brain," is as yet certainly a mooted question. It seems to me that it can not be done without a blood clot forming or wounding a blood vessel, or that paralysis may ensue; if such is the case, then it is not a justifiable operation. Some portions of the paper merit much praise, and as such I have been much interested.

Dr. R. Tilley thought the surgeon was not justified in doing more at the first consultation in the case of the toy-pistol tetanus cited in the paper, than the removal of the piece of wadding and the mere cleansing the wound and dressing it properly and using antiseptic measures, etc. Regarding suture of nerves and union of nerve tissues, experiments have been tried where crossing the nerves has been done by crossing the distal end over the central portion (X thus), and then it took from two to ten weeks before they became adherent and function restored; complete paralysis has occasionally resulted from the procedure.

A motion that the society do now adjourn prevailed.

L. H. M.

CHICAGO MEDICAL SOCIETY.

The annual business meeting of this society was held on the evening of April 7, 1884, with the President, Dr. D. W. Graham, in the chair. Eighty-five members were present.

The annual reports of the Secretary, Treasurer, Committee on Library, and Auditing Committee, were read, received, accepted, and placed on file. Appended are the reports of each, in synopsis, after which election of officers for the ensuing year was held.

SECRETARY'S ANNUAL REPORT FOR THE CURRENT YEAR ENDING APRIL 7, 1884.

Mr. President, and Members of the Society:—

While there may be nothing novel in my submitting to you a

résumé of that which goes to make up a report of the proceedings and business transacted in this society for the current year of 1883, it will, we trust, prove most gratifying and favorable to the members to be presented herewith a report which closes more than thirty years of our existence as an organization. During the year there has, probably, been a greater amount of more earnest work done than has ever before been performed by us. The duties of each one of you, it is presumed, have, to a certain degree and extent, been correspondingly increased. And I take great pleasure, therefore, this evening, in being able to make the very flattering statements about to follow, statements that in their simplicity may commend themselves to you; that the field gone over by us represents an advance that never before have we attained, so far as the knowledge of the present incumbent extends. This report will also contain a few figures for comparison regarding the business transacted in the society for the years 1882 and 1881, respectively.

During the year we have held 19 regular meetings and 1 special meeting.

Thirty-eight scientific essays and papers, written by 30 members, and a number of reports of cases, in writing, have been presented, with a larger number of pathological specimens than during any former year for a very long time, besides several nstruments of cure and mechanical appliances that have been exhibited.

Five hundred and four members and 134 visitors have attended 20 of the meetings, being in all 630 physicians and students, compared to 450 members and 120 visiting physicians, or 570 persons in attendance during 1882, and 304 members and 99 visitors, or 403 persons, in 1881.

The largest number in attendance at any of the meetings was about 100. The smallest number that attended any of the meetings is only 12. The average number of members in attendance at each meeting is $24\frac{14}{20}$ of guests $6\frac{14}{20}$; or a total of $31\frac{8}{20}$, compared to 30, the average number that attended the society the year previous, and 24, the average attendance during 1881.

Thirty-five new members have been received into active membership. (This number does not include the accessions, 8, this

evening.) Compared to 34, the number admitted in 1882, and 18 elected to membership during 1882, or 87, the entire number received in the society during the three years of the present incumbent.

The membership list one year ago consisted of 210 members, and 181 constituted the number at the close of the year 1881. An increase of 35 during the year would make the total membership 245. Of this number, one has passed to the silent land, one resigned, and one left the city. This number of 3 deducted will leave a correct and accurate list of 242 members constituting this society. There are others who have removed from the city that wish to retain their membership, so that out of our total membership some 6 or 8 are non-resident members, of which a word upon this part of the report will be added later.

No less than 235 postal card announcements have been issued for each meeting, or a total number during the year of not less than 4,700. Regarding the time required to superscribe this number at the rate, computed approximately, of 40 postal cards an hour, it would take nearly 120 hours time to do this, which, at the rate of 10 hours a day, would be equivalent to 12 good days work for this single item alone to have been performed. Besides this, about 160–5 pages of records have been transcribed in this book, and a large number of communications answered. Your Secretary has also recently revised the membership list with the address of each member, and transferred the same, along with copying the Constitution and By-Laws, in the new book of records, which is the largest and finest we have ever had, and which I now show you.

The pages of records may, for sake of illustration, be compared to 86 and 61 pages, respectively, that were recorded during the two years previous. Perhaps no part of the records will find more ready appreciation than the faithful *verbatim* reports of the discussions. I say faithful, as implying as near as possible, that of a retentive memory, in addition to the comprehensive notes that were taken at the time of debate, and as discussion is clearly an important feature of our sessions, where they have appeared in print, an endeavor has been made to give to the profession everywhere most clearly the individuality of the mem-

bers and the views of those who participated, without partiality being shown to anyone.

The list of papers includes a varied assortment of topics, the best that has ever been written by the members and presented here. In many of the papers there was so much value that they have been songht by other associations and re-read as well as being quoted, in every instance in abstract form or in their entirety, in several medical journals. And we trust the high standard in this respect will be maintained. The subjoined list of papers, including the author and date of reading, constitute this part of the year's summary.

(1) Prevention of Contagious Diseases and our Hospital Accommodations for Children. Dr. Frank E. Waxham, April 2, 1883.

(2) Treatment of Empyema. A paper prepared by Dr. E. F. Ingals, and read by Dr. W. L. Dorland, April 16, 1883.

(3) A Running Commentary on the Relation of Micro-Organisms to Disease, with an exhibition of 30 micro-photographs. Dr. W. T. Belfield, April 16, 1883.

(4) Exhibition of Dr. Wm. P. Verity's improved derrick and suspension apparatus for the application of plaster casts. Dr. Frank S. Johnson, May 7, 1883.

(5) Observations on the Published Proceedings of the Meeting of the Illinois State Board of Health, held at Chicago April 12–14, 1883. Dr. Ephraim Ingals, May 7, 1883.

(6) A Report on Recent Research in Operative Surgery. Dr. John E. Owens, May 21, 1883,

(7) "Stammering" is the subject of an amusing and instructive paper read by Dr. Alonzo Bryan, June 4, 1883.

(8) Exhibition of Bacteria under the Microscope, Removed from a Decayed Tooth. Dr. Robert Tilley, June 4, 1883.

(9) A paper on Obstetrics, including a report of a Trio of Triplets. Dr. Henry Ogden, June 18, 1883.

(10) How Doctors and Medical Societies should be Made More Efficient. Dr. Simon Strausser, July 2, 1883.

(11) Mechanical Equivalent to Animal Heat. Dr. H. D. Valin, July 16, 1883.

(12) Report of a Case of Bilateral and Forward Dislocation of

the Fourth Cervical Vertebræ (wherein the patient recovered). Dr. W. L. Axford, July 16, 1883.

(13) A Written Report of a Case of Acute Hepatic Abscess, with Autopsy. Dr. C. T. Fenn, July 16, 1883.

(14) The special meeting, September 26, 1883, at which Sir Wm. MacCormaco addressed the society on several topics pertaining to the major operations in surgery, will again be alluded to in another part of this report.

(15) History of Insanity in Chicago, from an Analysis of 3,000 Cases. Dr. S. V. Clevenger, October 15, 1883.

(16) Report of Three Cases of Insanity from Quinine. Dr. J. G. Kiernan, October 15, 1883.

(17) The Effects of "Manganese" in Amenorrhœa and Menorrhagia. Dr. F. H. Martin, October 15, 1883.

(18) Is Extirpation of the Cancerous Uterus a Justifiable Operation? Dr. A. R. Jackson, November 5, 1883.

(19) Treatment of Trichiasis by Electrolysis. Dr. J. E. Colburn, November 5, 1883.

(20) The Immediate Operation for Laceration of the Perinæum. Dr. E. C. Dudley, November 19, 1883.

(21) Glycosuria. Dr. Oscar C. DeWolf, November 19, 1883.

(22) Treatment of Bright's Disease. Dr. Chas. W. Purdy, December 3, 1883.

(23) Treatment of Granulated Eyelids with Jequirity. Dr. F. C. Hotz, December 3, 1883.

(24) Report of an Obstinate Case of Sciatica, including the Details of Operation by Stretching the Sciatic Nerve, with Recovery. Dr. F. E. Wadhams, December 3, 1883.

(25) Alveolar Abscess Simulating Nasal Catarrh. Dr. John S. Marshall, December 17, 1883.

(26) Packing-House Wounds. Dr. Wm. L. Axford, December 17, 1883.

(27) Perverted Sexual Instinct. Dr. J. G. Kiernan, January 7, 1884.

(28) Potts' Disease, (The Mechanical Treatment of Dorsal Caries with Great Deformity, and Exhibition of Apparatus.) Dr. C. E. Webster, January 7, 1884.

(29) Gelseminum Sempervirens. Dr. Charles G. Davis, January 21, 1884.

(30) Report of a Case of Cystic Growth in the Posterior Nares, with Operation for Removal and Final Favorable Result, paper prepared by Dr. E. F. Ingals, read by Dr. Robert Tilley, January 21, 1884.

(31) Paretic Dementia in Females, with a report of a case. Dr. S. V. Clevenger, February 4, 1884.

(32) Treatment of Stricture of the Urethra. Dr. Henry J. Reynolds, February 4, 1884.

(33) Report of a Case of Ventral Hernia. Dr. Wm. L. Axford, February 18, 1884.

(34) Report of Three Cases of Arrested Fœtal Development., or Maternal Impressions. Dr. Luke A. Harcourt, February 18, 1884.

(35) Potts' Disease as Illustrating the Principles of Early Diagnosis. Dr. C. E. Webster, March 3, 1884.

(36) Report of a case of Aneurismal Tumor from the Arch of the Aorta (with specimen). Dr. O. J. Price, March 3, 1884.

(37) On the Ætiology of Typhoid Fever. Dr. J. F. Todd, March 17, 1884.

(38) Select Topics in the Surgery of the Nervous System, subdivided—I. Suture of Nerves. II. Elongation of Nerves. III. Exploration of the Brain by the Hollow Needle, paper prepared by Dr. Roswell Park, and read by Dr. L. H. Montgomery, March, 17, 1884.

A number of important committees have been appointed during the year, one of the most important of which is the Committee on Library. A review of their work has also been embodied in this report (for fear, perhaps, that they would not be present or prepared), but I notice its chairman present, and you will therefore hear from him in detail a more interesting report than this one. Twenty delegates from this society attended the annual meeting of the American Medical Association in Cleveland, last year, beside other permanent members of the Association from this society that attended, swelling the number to thirty-four. A slight digression for a moment, yet apropos to the subject, will be pardoned, when I allude to an extract from a letter

recently received from the Permanent Secretary of the Association. He states: "The present membership is about 3,000, of which 1,100 attended the meeting one year ago. Your society did well," and this year if the twenty-five delegates to be elected to-night can attend the coming meeting of the Association to be held in Washington the first Tuesday in May next, assuming that the great distance will prevent more than thirty from attending altogether, who are members of this society, it certainly is to our credit, if the entire number in attendance at the Association meeting should consist of one-thirtieth of its members from Chicago. We hope also that all who can do so will attend the meeting of the State Society to be held in this city, beginning on the 3rd Tuesday of May next.

To recapitulate. One special meeting was held for the informal reception of a distinguished Fellow, Sir William MacCormac, with the number of regular meetings alluded to and regular order of scientific business. Well may we have reason to feel proud of the honor to be a member of the Chicago Medical Society, and our half dozen colleagues who are not resident members, some of whom are located in cities of other states, I believe desire to retain their membership here, if for no other reason, as two have informed me, than that of receiving the anticipated postal card announcement.

Regarding discipline and courtesy to each other, and to myself particularly, during the year just elapsed, I can bear testimony that a great deal of it has been extended, and it is to your interest as well as having the best interests of the society at heart, that this fraternal feeling for each other should long continue to exist, and of which the success this society has achieved is greatly due, and before closing I desire to add:

Be pleased to accept my thanks, especially for the many personal favors bestowed, and if mistakes have occurred, as they most surely will now and then, do not attribute it wholly to the officers, but extend your leniency to other causes and imperfections in proportion to the great pleasure the duties of the work have been performed by the Secretary; and for fear, possibly, of being misunderstood, I wish to state again, our success has

been greatly aided by your united efforts, and with this I may say officially to you "vale!"

LISTON H. MONTGOMERY.

65 Randolph St., April 7, 1884.

The following is a synopsis of the voluminous report of the Committee on Library, which is also their first annual report, submitted by Dr. Edmund Andrews, Chairman:

Money appropriated by the society	$500.00
Money contributed by physicians, dentists, and druggists	317.00
Money pledged by four gentlemen to meet transportation of books from Europe and other expenses	50.00
110 volumes of books, donated by various parties, estimated cash value	155.00
Total	$1,022.00

Of the cash above stated we have expended the following sums:

Paid W. T. Keener, of which $500 was paid by the Treasurer of the society according to the appropriation	$528.15
Paid for postage both ways, on circulars sent to 1,500 men	63.00
Paid for stationary and printing	15.45
Paid for express charges and sundries	2.50
	$609.10
Which sum deducted from $817, the amount actually collected, as above stated, leaves cash on hand	$207.90

This latter sum, with the $50 pledged by four gentlemen, will more than cover the cost and transportation of books, which we have ordered from Europe.

Several well-known works are omitted, because new editions are about to appear, which will be best to purchase next year. By careful economy of the funds, we have been able to purchase

the great French work, called the Dictionaire des Sciences Medicales; 125 "half volumes" are now out, and the rest will soon be issued. This magnificent work will give us the best thoughts of the French profession on every medical and surgical topic.

Then a list numbering 149 volumes, showing the titles of the works purchased and ordered, was read—also a list of eleven of the representative medical journals purchased.

Also a list of medical and surgical works donated by the following persons, valued at least to be worth $155.

Mrs. George C. Clark, 62 bound volumes.
W. T. Keener, 3 bound volumes.
Dr. R. B. Treat, 9 bound volumes.
Dr. R. Ludlam, 9 bound volumes.
Park, Davis & Co., 10 bound volumes.
Dr. A. B. Stockham, 3 bound volumes.
Dr. A. H. Foster, 3 bound volumes, worth at present, $30.
Dr. Justin Hayes, 1 bound volume.
Dr. H. P. Merriman, 6 bound volumes.
Anonymous Donor, 2 bound volumes.
Dr. E. Andrews, 3 bound volumes.

Summary of volumes:

Bought of W. T. Keener	160 vols.
Ordered from Europe, but not arrived	74 vols.
Books donated	110 vols.
Total	344 vols.

We find an increasing interest and enthusiasm on this subject on the part of the profession, and plans have been laid before us for raising very much larger sums annually for a period of years. The authorities of the Public Library coöperate with us more cordially, and are now diligently at work cataloguing and shelving the books preparatory for use. In accordance with the advice of this society, which we heartily endorse, the Librarian will keep them always ready for reading in the library and not loan them out. Very respectfully submitted,

E. ANDREWS, Chairman,
F. C. HOTZ,
OSCAR C. DEWOLF, Committee on Library.

Per L. H. MONTGOMERY, Secretary.

The following officers were elected for the ensuing year:

Dr. D. A. K. Steele, President.

Dr. Chas. W. Purdy, 1st Vice-President.

Dr. Curtis T. Fenn, 2d Vice-President.

Dr. Liston H. Montgomery, Secretary (re-elected.)

Dr. E. Fletcher Ingals, Treasurer, (re-elected.)

Dr. Wm. E. Quine, Dr. G. C. Paoli, Dr. D. R. Brower, Committee on Membership.

Dr. D W. Graham was elected to the vacancy on the Committee on Library, caused by the expiration of Dr. Oscar C. DeWolf's time, as provided in the By-Laws.

Fifty dollars was voted unanimously to the Secretary, Dr. L. H. Montgomery, as a testimonial and souvenir for duties he had performed as an official during the year.

Fifty dollars was also voted unanimously to Messrs. John B. Drake & Co., proprietors of the Grand Pacific Hotel, for use of their parlors and other courtesies extended to the society.

Fifteen dollars was also voted unanimously to the Treasurer, Dr. E. F. Ingals, for losses he may have made good (as per discrepancies) in his annual report, as per Auditor's report.

Considerable miscellaneous business was rapidly dispatched, including a complimentary vote of thanks to the retiring President.

Dr. W. H. Curtis moved that this society do now adjourn, and the society at a late hour stood adjourned.

The following delegates from the Chicago Medical Society were elected at the annual meeting, held at the Pacific on the evening of April 7, 1884, to the American Medical Association, which will meet at Washington, May 6 next:

Dr. F. M. Wilder, Dr. A. Reeves Jackson, Dr. W. W. Allport, Dr. Eggleston Burrows, Dr. N. E. Rice, Dr. Frank Billings, Dr. J. G. Kiernan, Dr. E. F. Gaston, Dr. J. F. Todd, Dr. W. T. Montgomery, Dr. W. E. Clarke, Dr. C. S. DeVeny, Dr. Simon Strausser, Dr. C. J. Simons, Dr. A. H. Cooke, Dr. Philip Adolphus, Dr. J. E. Walton, Dr. T. W. Brophy, Dr. J. S. Marshall, Dr. H. J. Reynolds, Dr. L. H. Montgomery, Dr. J. H. Chew, Dr. E. F. Ingals, Dr. T. W. Miller, Dr. C. T. Parkes, Dr. E. J. Doering.

AUDITOR'S REPORT.

Dr. Curtis T. Fenn, Chairman.

1. Expenditures.—All expenditures were attested by proper vouchers, except $3 for clerical labor and $7.60 collectors' fees.

2. Receipts.—On comparing the cash list with the membership register and schedule of annual dues, it appeared that three ordinary members were on the one hand credited with dues which did not on the other hand enter into the list of cash received.

The omission was accidental, and partly due to disputes concerning the terms of the fiscal year. All questions of this kind have been, happily, removed.

3. Amount on hand at the beginning.—This part of the report it has been difficult to verify. The society has not required its reports to be audited, and for five years there has been no auditing committee until now.

That committee were, therefore, invited to take the books and to go through them searchingly and thoroughly. In glancing back, it was noticed that an entry in the cash account bearing date November 1, 1880, To balance, $2.65, re-enters in balancing August 4, 1881, causing an error, the correction of which will be $2.65 in favor of the Treasurer for the year ending April, 1882.

But there were also slight discrepancies in 1882 between the schedule of dues and the cash list, three persons having received credit and no corresponding entry having been made of the amount.

These three, although unable to show receipts, had refused to accept repeated duns, and the Treasurer on his part, believing the dues to be unpaid, had simply refused to charge the amount to himself. However, in view of the continued assertion of these members of their recollection of settlement, the Treasurer has made the books tally by taking the amount, as he believes, from his own pocket.

From 1882, the examination led to 1881, beyond which the committee did not find it convenient to go.

In 1881 sixteen persons are credited with dues whose names do not figure in the cash list. But it was in that year that Treas-

urer Davis died. The following note from the present Treasurer sufficiently explains itself.

"In looking over my ledger, I find that on the 9th of October, 1880, Dr. N. S. Davis handed to me all that was left at the time of the collections since the annual meeting, amounting to $17.40. I have no way of telling what the expenses of the society had been during those six months, neither are there any records to show how much the former Treasurer may have had on hand at the beginning of the fiscal year.

"Therefore I see no possible way of making the register before 1881 tally with the cash book, and as several of the dues for 1880 were paid in 1881, and there is no way of telling in most instances for what year any special payment should apply, I do not think it possible to make 1881 and the cash book tally. It will not be possible accurately to ascertain even about 1882."

From this may be seen what lay before the Auditor. One or two matters of simple criticism may be mentioned. The Treasurer's report of 1881 ends with $173.67 in the treasury. The report of 1883 begins with $156.32.

Again, the report of 1882 ends with $346.07, while the report of 1883 begins with $339.07.

These discrepancies in the reports themselves are explained by the fact that the present Treasurer was in the habit of including receipts and expenditures up to the close of the annual meeting in the year that had just preceded them.

There is one more item of some importance. Of thirty-three new members in 1883, there were fifteen at the end of the year who had not paid the initiation fee. These were all enrolled and the money in the treasury, therfore, there should have been $15 more (by Article V, Section 2 of the By-Laws) in the treasury.

Of seventeen new members in 1882, only twelve paid their initiation fee, making an obvious loss of $5 in the report of that year.

Returning to the matter in hand, this examination finds $6 to be added in 1883, and $6 in the previous year.

But $2.65 have to be subtracted in 1882. Moreover, in that year there was one payment of annual dues credited to "unknown," which must be subtracted, in all $4.65, leaving $1.35.

This and $6 makes $7.35 to be added in favor of the society. Instead, therefore, of $547.82 the true balance to 1884 becomes $550.06.

Respectfully submitted,

CURTIS T. FENN, Chairman.
LISTON H. MONTGOMERY, Secretary. } Auditing Com.

This report was, upon motion, duly seconded, received, accepted, and placed on file.

MICHIGAN STATE BOARD OF HEALTH.

[Reported for the CHICAGO MEDICAL JOURNAL AND EXAMINER.]

The annual meeting of the State Board of Health was held at its office in Lansing, April 8, 1884.

The members present were, President Avery, Drs. Lyster, Hazlewood, Vaughan, Tyler, and Secretary Baker.

Reports of the sanitary condition of the Wayne County Poorhouse and Asylum, and of the Barry County Jail, were made, by the committee who examined these institutions, and these reports were ordered printed.

Dr. Vaughan read a paper prepared by Dr. C. P. Pengra, which gave results of investigations relative to the purification of water by freezing. As a result of a series of elaborate experiments, conducted in the University laboratory, Dr. Pengra found that, contrary to the general impression, freezing does not render water pure. Ordinarily, he found less infusoria and bacteria in ice than in the water from which it was frozen, but the ice contained them in numbers sufficient to preclude its use. In harvesting ice, the greatest care should be taken to get it from a pure source. This valuable paper will be published in the Report of the Board.

The Secretary presented a summary compiled from lists of medical practitioners registered under the new law. The number of counties in the State is 80, from 76 of which reports have been received. The number of registrations returned is 3,285, but in some cases physicians are registered in two or more counties. The number reported to have graduated is 2,351; those who

had attended some college but had not graduated, 208; those who had attended no college, 726. The number belonging to all schools reported as having graduated is 72 per cent. of the whole number, the non-graduated collegiates are 6 per cent., and the non-collegiates are 22 per cent. of the whole number. The "graduates" are from all classes of medical colleges, hospitals, medical societies, etc. The number of different "schools" of medicine reported in these sworn statements is about 75, including "Cureopathic," "Indian," etc. In at least one instance it is reported that the sworn statement had to be signed by a "mark," the practitioner being unable to write even his own name.

The number registered as belonging to the four most prominent schools of medicine is as follows: Regular, 1,533; homœopathic, 490; allopathic, 398; eclectic, 366. The proportion of graduates to practitioners is: regular, 87 per cent.; homœopathic, 74 per cent.; allopathic, 81 per cent.; eclectic, 47 per cent. (Of all schools, as above stated, the per cent. is 72).

It was decided to print the names and addresses of the health officers in Michigan as soon as full returns are received. The number in the State is nearly 1,400. A new edition of the document on the prevention and restriction of scarlet fever was ordered, the last edition of 30,000 copies being nearly exhausted. It was also decided to publish facts relative to several outbreaks of trichiniasis in Michigan.

The following resolutions were unanimously adopted:

Resolved, That this Michigan State Board of Health respectfully and earnestly memorializes Congress to pass the bill introduced into the House of Representatives, Jan. 8, 1884, by the Hon. Casey Young, or some similar bill, providing for the prevention of the introduction of infectious diseases into the United States, and for procuring information relating to climatic and other conditions affecting the public health.

Resolved, That we consider the National Board of Health the best existing and the proper agency to carry on the work mentioned in the preceding resolution.

The Board discussed the merits of several text-books on physiology and hygiene with special reference to the effects of alcohol on the human system, and approved for use in the schools: Martin's "Human Body," briefer course, second edition, containing special chapter on alcohol and other narcotics; and Dr. Eli F. Brown's "Alcohol: Its Effects on Body and Mind."

The amount of office work during the quarter has been large, and has included: the perfecting of arrangements for holding a Sanitary Convention at Hillsdale; preparation of the proceedings of the Ionia Sanitary Convention for the printer; the making of a compilation of the public health laws of Michigan; proof-reading on 96 pages of the Annual Report; issuing blanks for the return of the new health officers in each city, village and township in Michigan; issuing the regular weekly bulletins of meteorology and of sickness in Michigan; the correspondence of the office (postals are not usually copied), covering 750 pages of letter-copying book, of which over 150 pages have direct reference to the prevention and restriction of communicable diseases in Michigan; and the regular computations of data relating to meteorology and sickness.

OBITUARY.

The numerous friends in the Northwest of Prof. Chas. T. Hunter, A.M., M.D., late of Philadelphia, were lately pained by the report of his death, in his forty-first year. Dr. Hunter was a physician of acknowledged ability, and his early death cuts short a career of unusual brilliancy and usefulness. He was graduated from the University of Pennsylvania in 1868, taking his degree most creditably, and had since been engaged in the practice of his profession in that city. He was associated at one time with the medical Faculty of the Pennsylvania Hospital, and subsequently was elected Demonstrator of Anatomy in the University of Pennsylvania. It was while he was engaged in his professional labors that the accident occurred which has just terminated fatally, and in the loss to the profession of one of its brightest ornaments. About three years ago, while Dr. Hunter was engaged in dissection, a slight cut was inflicted upon one of his fingers, near the nail. The most skillful medical treatment failed to correct the rapidly and ominously advancing septicæmia which resulted. Recently he was removed from his city residence to his father's at Haverford College, in the hope that country air might help to allay the severity of his symptoms, but they continued to increase till the entire system was affected, and death ensued after great suffering.

Dr. Hunter's name is associated with a number of the later advances made in surgery, among which may be named the surgical use of hot water, and the revival of the transfusion of food and subcutaneous injection of fluid aliments. He was the author of the anatomical portions of Packard's and Ashbridge's works, and of numerous papers that attracted attention not only from their intrinsic merits, but also from the fact of their authorship. Among those who bore his remains to their last resting place was his old friend and physician in his last illness, Prof. D. H. Agnew.

Prof. Hunter's acquaintance was highly prized in Chicago. During his late visit to this city, a visit enforced by the condition of his failing health, he made warm friends, especially among the members of the profession to which he belonged. Many of those who met him here in the entertainments which he graced with the charm of his conversation and the ripeness of his mature intellectual powers, mourn for the loss which American medicine sustains in the death which he bravely and calmly met, joining the noble army of martyrs to the advancement of science.

Editorial.

DR. DEARBORN.

The citizens of Chicago are familiar with the name of Dearborn. It is well known, in this locality at least, that the name was borne by General Henry Dearborn, and was in his honor given to the fort that occupies so large a space in the early history of this metropolis. But there are probably few medical men acquainted with the fact that the famous general was one whose military history was antedated by an honorable membership in their own profession.

Those who are interested in the precise facts to which we refer, should consult a scholarly paper on the subject of the Dearborns, prepared by Mr. Daniel Goodwin, Jr., of this city, lately read before the Chicago Historical Society, and now published in the proceedings of that body.

From this sketch, it appears that the Dearborn family in America began with one Godfrey Dearborn, born in Old Exeter, county of Devon, England, about the year 1600. He first came to the Massachusetts colony about 1639, and soon after this removal settled in Exeter, New Hampshire.

In the fifth generation of his family appears the name of Henry Dearborn, born at North Hampton in 1751, who grew up among the New England hills, a fine type of manly strength, agility, and beauty. "He was tall and straight, muscular and agile. He was noted as an unmatched wrestler, never having met his equal, and was an ardent sportsman. In all his journeys he carried his gun and rod and dog, and was an expert in cricket

and ball until long past middle life. When not engaged in business or exercise, he was a constant reader, and was master of as good English as the War Department has produced. After going through one of the best schools in New Hampshire, he began and completed a full course of medical instruction under Dr. Hall Jackson, of Portsmouth, a distinguished surgeon in the army of the Revolution."

Dr. Dearborn, before the outbreak of the Revolutionary war, was established in the practice of his profession at Nottingham. Taking up the habits of the young men in his vicinity, he made himself familiar, in his leisure moments, with military evolutions and the science of making war. "The spirit of the mountains was stirred." The sentiments that in our own day have prompted many doctors to join the rank and file of a volunteer army, were then moving the men who took such active part in the foundation of the American republic.

On the 20th of April, 1775, Dr. Dearborn heard the news that war had been begun by the action of the British troops at Lexington.

He made no delay. With sixty of his townsmen, who only knew that Boston and its inhabitants were in peril, they marched one afternoon, with guns on their shoulders, from Hampton to Cambridge, a distance of fifty-five miles.

This was the beginning of the doctor's military career. He was soon commissioned as a captain, in the first regiment commanded by Col. John Stark. In ten days he had enlisted a company, and marched with them to Medford, carrying on his own person both gun and sword.

We have not space to detail further the exploits of the young doctor-officer, nor to follow the other steps in his interesting career. We might with interest go with him into action at Bunker Hill, or march with him in the campaign under Benedict Arnold at Quebec, during which for a month he was prostrated by illness, cared for alone by a French boy, in a hut.

What stirring scenes were those in which he played his active part! Very different indeed were his, from the battle-fields on which Count Rumford led his foreign dragoons against the enemy. Of the latter, we had occasion to speak in a late number of this

journal, as another of the young New England physicians whom the stress of that Revolutionary crisis withdrew from the peaceful pursuits of their profession to the bloody fields of war. Rumford was every inch a Tory; Dearborn, a patriot of patriots. Rumford distinguished himself at Strasburg and Munich; Dearborn, at Ticonderoga, on the banks of the Hudson, at Valley Forge, Saratoga, Yorktown, and Monmouth; names inseparably associated with the patriotic sentiments of the people of this land. He was the personal friend of most of the great heroes of his day and cause, fighting successfully by the side of Stark, Arnold, St. Clair, Gates, Greene, Sullivan, and Washington himself. His career not only in the field, but in Congress, has occupied a proud position in the annals of this country's history.

The medical men of this America have little reason to be ashamed of the list of names they have contributed to the long roll of those who have distinguished themselves in other professions. Rumford, Warren, Dearborn—these were but the promise of the many who were to succeed them in a later war, where there were no fewer opportunities of showing to the world of what stern stuff they were made.

Chicago has named one of its finest avenues after the doctor-general, Henry Dearborn; and it is interesting to note that since it was first given, there has never been a proposal to change it.

ERRATA.

In the article on the Hymen, by Dr. E. S. McKee, in the May number of the MEDICAL JOURNAL AND EXAMINER, the following corrections should be made: For camisca, read camiscci; for primis, read fremis; for juonem, read juonum; for memiserem, read mesmerum; for virginitas, read virginates. In enumerating the punishments for rape of various States and nations, the fact that death is the punishment in Texas was omitted.

Domestic Correspondence.

[Having now with some patience published in full the statements and counter-statements of both parties to the question considered in the subjoined communication, we must decline to receive any further rejoinder from either side, as the subject is not specially interesting to the readers of this journal.]—EDS.

DUNNING, ILL., APRIL 21, 1884.

TO THE EDITORS OF THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

Gentlemen:—In the January number of your journal was published my article on Practice at the County Infirmary. Among other cases reported was that of J. C. McMullen, who, in trying to alight from a freight train while in motion, Nov. 1, 1882, sustained a compound comminuted fracture of the tibia and fibula, necessitating an amputation of the upper portion of the middle third of his left leg. The operation was performed by Dr. D. B. Fonda, who, in his reply to my article in the April number of your journal, takes exception to that portion of the article alluding to the case. First, because he considers himself persecuted on account of his close proximity to this and neighboring public institutions. Second, that the date the patient was admitted to this institution is erroneously stated in my article. Third, because of the statement that no ligature ends were found outside the stump when the patient was admitted, but that a "large bundle" was discovered where the stump sloughed. In reply, I disclaim all jealousy of or desire to injure Dr. F. or any other neighboring practitioner. If there is any feeling existing, a comparison between the two replies will show where it is. The remaining points

are covered by affidavits by Dr. Morgan, of Chicago; Dr. Bennett, of Minneapolis; Alexander Bruce, of this institution, and myself. As Dr. F. has seen fit to introduce several affidavits in his reply by himself, his son-in-law, and a reputed medical student, I consider myself extremely fortunate in having the affidavits of several medical gentlemen who are acquainted with some of the facts in the case. A. W. HAGENBACH, M.D.

I, A. W. Hagenbach, being duly sworn, on my oath do say, that I have in my possession the first copy of the article on "Practice at the County Infirmary," published in the January number of the CHICAGO MED. JOUR. AND EXAMINER, and that the first two dates in the case of "Ligature of Femoral and External Iliac Arteries" are there given as Nov. 1 and Nov. 4, instead of Oct. 22 and 26, and that the dates were taken from the Male Hospital Register of this institution. I further say that when J. C. McMullen, the person alluded to in my article, was admitted to the infirmary after the amputation of upper portion of the middle third of his left leg, there were no ligature ends outside of the stump, and that as the stump opened up by sloughing, numerous ligatures were found at the bottom of the wound, some cut short, others long and matted together. Further, that the main facts of the article are taken from notes made at the time by Dr. Morgan, of the Cook County Hospital, and myself, and that the case as reported is to the best of my knowledge in every respect true and correct.

A. W. HAGENBACH, M.D.,
Med. Supt. Cook Co. Infirmary.

Dr. Allen W. Hagenbach, personally known to me, has been duly sworn to the fact stated and subscribed to in the foregoing instrument, this eighteenth day of April, A.D., 1884.

[SEAL.] G. T. WOLF, Notary Public.
Dunning, Illinois.

CHICAGO, APRIL, 19, 1884.

EDITORS OF THE CHICAGO MEDICAL JOURNAL AND EXAMINER.

Gentlemen: — In reply to Dr. Blackburn's *a priori* criticism I beg leave to state: First, Dr. Worcester (op. cit., p. 274) says, "there are two or three agents employed by the old school whose

use you will do well to bear in mind, both for your patients' sake and *because you will not want to see your patient pass into another physician's hands.*" The agents alluded to are: chloral hydrate, in thirty grain doses; potassium bromide in ten grain doses; morphine in half-grain doses; hyoscyamine in three-quarter grain doses. It may be honest for Dr. Blackburn to practice in this way, but to me it seems the worst sort of therapeutic dishonesty. Second, Dr. Worcester did graduate from a regular school, practiced *medicine* for several years, then adopted a sectarian designation, and became a professor in a sectarian school. Such a change of views, if honest, is to be respected, but the honesty of such a course is usually suspected where a man profits by a change of views, and at the same time advocates the procedures cited from Dr. Worcester. If Dr. Blackburn's statement, that my assertion of the facts of Dr. Worcester's career above is false, be then true, Dr. Worcester committed perjury at the time of the Guiteau trial, for he swore to the facts above stated, and it is on his *sworn* testimony that I based the statements made. If Dr. Blackburn will read Dr. Worcester's book, and then read his evidence in the Guiteau trial, and contrast the views, he will alter his opinion as to Dr. W.'s ability and honesty. I am not an "allopath," nor do I know that such a sect exists. I am not opposed to the therapeutic views other than as opposed to my idea of what is rational. I object to sectarian designations in science, but am not even a bigot in this respect. Dishonesty in the statement of science is what I am opposed to, and from the extract cited you can judge how just my criticism of Dr Worcester was. Very sincerely,

JAS. G. KIERNAN.

I, Alex. Bruce, being duly sworn, on oath say that I was nurse of the male surgical ward, Cook County Infirmary, November 1, 1882, when Joseph C. McMullen was admitted with the left leg amputated in the middle third. That I was present at the first and all subsequent dressings of the amputated member up to the time of the death of the said J. C. McMullen, and that at the first dressings no ends of ligatures were outside of the stump; their absence was remarked upon at that time, and that the first liga-

tures seen was after the stump had sloughed, when a large bundle and several short ligatures were seen in the stump, and that both bones of the leg protruded beyond the end of the stump when the second amputation was made by Drs. Morgan and Bennett, of the Cook County Hospital. ALEX. BRUCE.

Mr. Alex. Bruce, personally known to me, has been duly sworn to the facts stated and subscribed to above.

[NOTARIAL SEAL.] G. J. WOLF,
Dunning, April 18, 1884. Notary Public.

CHICAGO, April 7, 1884.

I, Wm. E. Morgan, being duly sworn, on my oath do say: That on November 16, 1882, at Cook County Infirmary, State of Illinois, during the temporary absence of Dr. A. W. Hagenbach, and with the assistance of Dr. Bennett, then interne of Cook County Hospital, I re-amputated a sloughing stump on the left leg of one J. C. McMullen, and that the following is a verbatim copy of a note written by me in the hospital records concerning said stump; also that the description is correct, and was verified by me by autopsy of the amputated part:

"Stump sloughed and opened up, revealing a large bunch of silken ligatures left in the stump. A second operation was deemed advisable, so the operation was performed on the 16th, a re-amputation being made one and a half inches higher than the first."

I do not wish to enter into any professional discussion, but I remember distinctly the condition of the stump, and make this affidavit simply from the facts then existing, regardless of whom the statement may hit. There were many ligature ends, some short and some long, wadded into a bundle, having been some time previously sewed up, *bagged*, if I may use the expression, within the stump, and the ends of both tibia and fibula protruded from the stump. WM. E. MORGAN, M.D.

3160 State Street, Chicago, Ill.

Subscribed and sworn to before me this seventh day of April, A. D., 1884.

[NOTARIAL SEAL.] D. MCDONALD, Notary Public.

STATE OF MINNESOTA, }
County of Hennepin. }

Dr. E. R. Bennett, being duly sworn, and on his oath deposes

and says, that on November 16, 1882, at the Cook County Infirmary, in the county of Cook, State of Illinois, during the temporary absence of Dr. A. W. Hagenbach, I assisted William E. Morgan, then interne of the Cook County Hospital, in re-amputating a "sloughing stump" on the left leg of one J. C. McMullen, and that the following is a correct description of the stump before re-amputation: Stump sloughing, flaps ulcerated and shortened, with end of tibia and fibula protruding. On opening up the stump, I distinctly remember finding a large bunch of silken ligatures matted together which were left in the stump. A second operation being deemed advisable, a re-amputation was performed upon the 16th day of November, 1882.

DR. E. R. BENNETT.

Subscribed and sworn to before me this 16th day of April, 1884.

[NOTARIAL SEAL.] JOHN F. HAYES, Notary Public.
Hennepin County, Minn.

GENTLEMEN: — In your April number, pages 439 and 442, appears a criticism by one J. G. Kiernan, on "Insanity and its Treatment," by Samuel Worcester, M.D., concerning which I wish to say a few words. I do not object to any honest, plain criticism of any medical work; for so much chaff is written that we have to wade through oceans of it to gather one little grain of truth; but I do earnestly protest against personal abuse, such as appears in the article mentioned. Dr. Worcester is called a "homœopathic renegade," which would imply that he is a traitor to his homœopathic principles or faith. I suppose the author meant he was a traitor to allopathic principles. *This is not true*, and only illustrates the bitter malignity with which the allopathic school has always pursued those who dared to differ with them. That it was meant to be personal is proven upon page 442, where Dr. W. is charged with "dishonest therapeutic views," and it seems to me that such remarks concerning a gentleman of Dr. S. Worcester's standing could not be written by a decent man, or published in a respectable medical journal.

G. E. BLACKBURN.

No. 2819 Cottage Grove Avenue, April 15, 1884.

Book Reviews.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By ROBERTS BATHOLOW, M.A., M.D., LLD. Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, etc. Fifth edition, revised and enlarged, 8vo. cloth, pp. xxii–738, New York: D. Appleton & Co., 1884.

This, as well as the work of the same author on Practice, is one of the many treatises of which the American medical profession feel proud, and it will pass to posterity as one of the medical classics, for it embodies in its tersely written pages the national ideas of therapeutics as they are applied to-day by the best practitioners, and as they are likely to remain, with a few modifications, for some decades yet.

This new revised edition is produced, the author tells us, in order to conform it to the sixth decennial revision of the United States Pharmacopœia, though one soon expected to see a new edition of the Materia Medica, for they have been supplied at the rate of one edition for less than two years since the appearance of the first; a phenomenon rarely seen in medical literature.

The methods of Prof. Bartholow are at the same time scientific and simple. His classification of the subject will be well appreciated by students especially, and the bibliography which appears at the end of each article, is a commendable feature which is found in all the leading scientific books of the day, and facilitates study.

However, in spite of so many commendable arrangements, the work fails to give us the doses of medicines in the metric system, and will thereby help more than others to retard progress in a practical direction. Although its pages are most likely

stereotyped, the dose of most drugs is stated in a separate paragraph, and it seems that the cost of adding metrical figures would have been slight.

A late review of this book complains of some discrepancy between it and the new pharmacopœia. We only find a slight difference in regard to laudanum, and it is one which is not likely to lead to any mischief, in our opinion, and the profession at large will be thankful for this new edition.

The enthusiasm of the author for the treatment of disease by the hypodermic syringe has been blamed by some, but we are persuaded that a more scrupulous cleanliness in the physician, and a little less ignorance in the community, will eventually bring that method into even a higher repute and more extensive use than Bartholow recommends now. The daily use of the syringe in our hands has failed, as in hundreds of others physicians' hands, to produce a single abscess yet, but the antiseptic precautions necessary in its use were always observed.

H. D. V.

HAND-BOOK OF ELECTRO-THERAPEUTICS. By DR. WILHELM ERB, Professor in the University of Leipzig. Translated by L. PUTZEL, M.D., with 39 wood-cuts. June No. of Wood's Library. 8vo, cloth, pp. xi–366. New York: William Wood & Co. 1883.

The first 32 pages of this volume are occupied by a physical introduction, from which all elementary knowledge of electricity has wisely been omitted, as it is supposed that every physician has some notions of electrical science. Follows a physiological introduction of 25 pages, in which the general effects of electricity on the living body are briefly stated. Then comes Electro-Diagnosis, in which Erb has gained so much reputation, especially in connection with the Reaction of Degeneration. Many brief cases are reported to illustrate the laws of electrical action on different classes of cases. The fourth part of the volume is given to General Electro-Therapeutics, beginning with page 103.

After a few remarks on the most important electro-therapeutical theories, that of Dr. Poole, of Ontario, that electricity is a paralyzer, being omitted, the author tells us that now, as form-

erly, electro-therapeutics must be studied on an empirical basis. Of the electrical bath Erb says: "*A priori*, it cannot be denied that the electrical bath may produce very marked effects, but the therapeutical experience hitherto obtained is not calculated to inspire great faith in its efficacy." The author believes that the most important principle is the treatment in loco morbi.

Part V, and last, treats of Special Electro-Therapeutics, and occupies the most of the volume. Diseases of the Brain, including the Psychoses; Diseases of the Spinal Cord; Diseases of the Peripheral Nerves; Paralysis and Atrophy; Neuralgia; Spasm; Neuroses; and a few other classes of diseases, form the main divisions of this part.

As electricity has not yet come into general use among ordinary practitioners, this treatise will be found by them amply sufficient. H. D. V.

ELEMENTARY PRINCIPLES OF ELECTRO-THERAPEUTICS. For the Use of Physicians and Students, with 135 Illustrations. Prepared by C. M. HAYNES, M.D. Published by the McIntosh Galvanic and Faradic Battery Co., Chicago, Ill. 8vo. 420 pp. Price, $2.

This is a plain, practical, and complete exposition of the subject of which it treats. It contains suggestions in regard to the selection and care of batteries, comparisons of the different forms of electricity in their physiological effects and therapeutic action, and the application of electricity to diagnosis. It discourses quite in detail on the subject of electrolysis, the galvano-cautery, and the electro-thermol bath. It also contains a full vocabulary of electrical language. The book will be found very useful to the busy practitioner who wishes to get at the practical facts of electro-therapeutics in a clear and succinct form. The illustrations are numerous and many of them original, and add much to the value of the book. The paper, composition, and press work reflect credit on those who had charge of the details of its publication.

On the whole, we can earnestly commend the book to all seeking information upon the very important subjects it elaborates.

D. R. B.

THE MEDICAL STUDENT'S MANUAL OF CHEMISTRY. By R. A. WITTHAUS, A.M., M.D., Professor of Chemistry and Toxicology in the University of Buffalo; Professor of Chemistry and Toxicology in the University of Vermont; Professor of Physiological Chemistry in the University of the City of New York; Chemist to the City of Buffalo, etc., etc. 8vo, cloth, pp. xi–370. New York: William Wood & Co. 1883.

"In venturing to add another to the already long list of chemical text-books, the author trusts that he may find some apology in this, that the work is intended solely for the use of a class of students whose needs in the study of this science are peculiar.

"While the main foundations of chemical science, the philosophy of chemistry, must be taught to and studied by all classes of students alike, the subsequent development of the study in its details, must be moulded to suit the purposes to which the student will subsequently put his knowledge. And particularly in the case of medical students, in our present defective methods of medical teaching, should the subject be confined as closely as may be to the general truths of chemistry and its applications to medical science." (From the Preface).

This is the third Manual of Chemistry written for medical students by the author within a few years, and we do not believe that a more competent writer exists in America on the science therein treated.

The philosophy of the subject is briefly but clearly stated in the first 38 pages, in which are contained remarkably clear definitions of the properties of matter, its general and physical characters, and its chemical laws of combination. The classification of elements here adopted is surely commendable, although we fail to see why, from a philosophical standpoint, hydrogen and oxygen should form a class by themselves.

Organic chemistry, alcohols, ethers, animal fats, urine, etc., is not made a division by itself, but follows the carbon group, and forms the larger part of the volume. This is certainly a more rational treatment, but whether it will be found more useful and practical, time will show.

The few pages of laboratory technics inserted as part III, at

the end of the volume, will be of much use to the student, and one would wish that a larger part of the work was given to the methods of forming a laboratory for private study, but the author is content in this that "although the Manual puts forth no claim as a work upon analytical chemistry, we have endeavored to bring that branch of the subject rather into the foreground so far as it is applicable to medical chemistry. H. D. V.

SEXUAL IMPOTENCE IN THE MALE. By WILLIAM A. HAMMOND, M.D., Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School, etc. Small 8vo, cloth, pp. 274. $2.50. New York: Bermingham & Co., 1883.

The fascinating style of Dr. Hammond is recognized in every page of this book, which is also rich in original and unique observations. Never before has the subject of impotence received a more careful nor perhaps a more extensive treatment, and, though the reader's natural conclusions will be sad, and will lead him to look with pity on human miseries; though he may philosophize on the *impotence* of therapeutics as applied to-day; yet, he will profit by this interesting statement of the most degraded phase of human morality. The varied experiences of Dr. Hammond enabled him to exhaust thus his subject, and this and other features will more than make up for the scientific methods in which this monograph is lacking. The four chapters into which the book is divided are the following: Absence of Sexual Desire; Absence of the Power of Erection and of Consequent Intromission; Absence of the Power of Ejaculating the Seminal Fluid into the Vagina; Absence of the Ability to Experience Pleasure during the Act of Copulation and during the Emission of the Semen.

This book, we are sorry to say, will offer quacks a rich source of references, and help them more than any work to terrorize and victimize the class on which they thrive. H. D. V.

Selections.

HOSPITAL WITH CIRCULAR WARDS. Communicated by Mr. J. BROWN, F.R.C.S.

For some time past, an attempt has been made to raise the funds needed to provide a hospital for the town and district of Burnley, Lancashire. The population exceeds 100,000 persons. In addition to the sum of £1,500, as the nucleus of an endowment fund, the committee have succeeded in obtaining subscriptions to the building fund to the extent of £12,600; and a site of two acres in extent has been given, along with a subscription of £1,000, by the executors of the late Colonel Hargreaves. Towards the building fund over £3,000 have been paid in by the working classes within a period of nine months. This has resulted from systematic collections made at the mills and workshops every four weeks. These collections the committee have suspended for the present, owing to the disturbed state of the cotton trade throughout the whole district, but they hope to be able to resume them ere long.

The plans approved of by the committee provide for the erection of a hospital with one-story pavilion wards of the circular form, as suggested by Professor Marshall, President of the Royal College of Surgeons. Two of these wards are to be built at present, with an internal diameter of sixty feet, for the accommodation of twenty beds each.

The architects, Messrs. W. Waddington & Son, of Burnley and Manchester, have designed a sun room, or day room, on the top of each ward, with a promenade twelve feet wide all round it. Access to the roof is given by a gently sloping spiral staircase surround-

ing the smoke and extraction flues, and occupying a closed-in space in the center of the ward, sixteen feet in diameter. There is then left for the ward itself an annular space twenty-two feet in width. The height of the ward at the eaves is fifteen feet, and at the inner portion sixteen feet. The roof is formed of concrete, supported on iron girders. The lineal wall space of the ward is 189 feet, giving an average wall space per bed, excluding doors, of about 8 feet 4 inches. The floor space is 132 square feet, and the cubic space 1,560 cubic feet per bed. Windows are placed between each bed, extending from two feet and a half from the floor to within a foot of the ceiling; and ample provision is made for ventilating, both at the floor level and at a height of about seven feet. From the inner part of the ceiling, and also from the floor, ventilating outlets are led to an extraction shaft which encircles the smoke flues.

The walls of the wards, water-closets, and bath-rooms are to be of glazed bricks or tiles. The floors of the wards are to be of oak, to be beeswaxed and polished. Separated from each ward by a cross-ventilated corridor are the bath-rooms and water-closets.

Connecting the circular wards with the main corridor is a well-ventilated passage, on either side of which is a single-bedded separation ward; and between these wards and the circular ward are the nurses' room and ward scullery.

A subway is provided from the cellar floor of the administrative block to the wards; in this all pipes will be laid; and along it coal, foul linen, cinders, and sweepings will be conveyed.

Provision is made on the site for the addition of four other wards similar in size to those described, and also for a children's ward for fourteen beds, intended to be forty feet in diameter, to have no central staircase, a sun-room, and to have a dome-shaped ceiling.—*Med. Press.*

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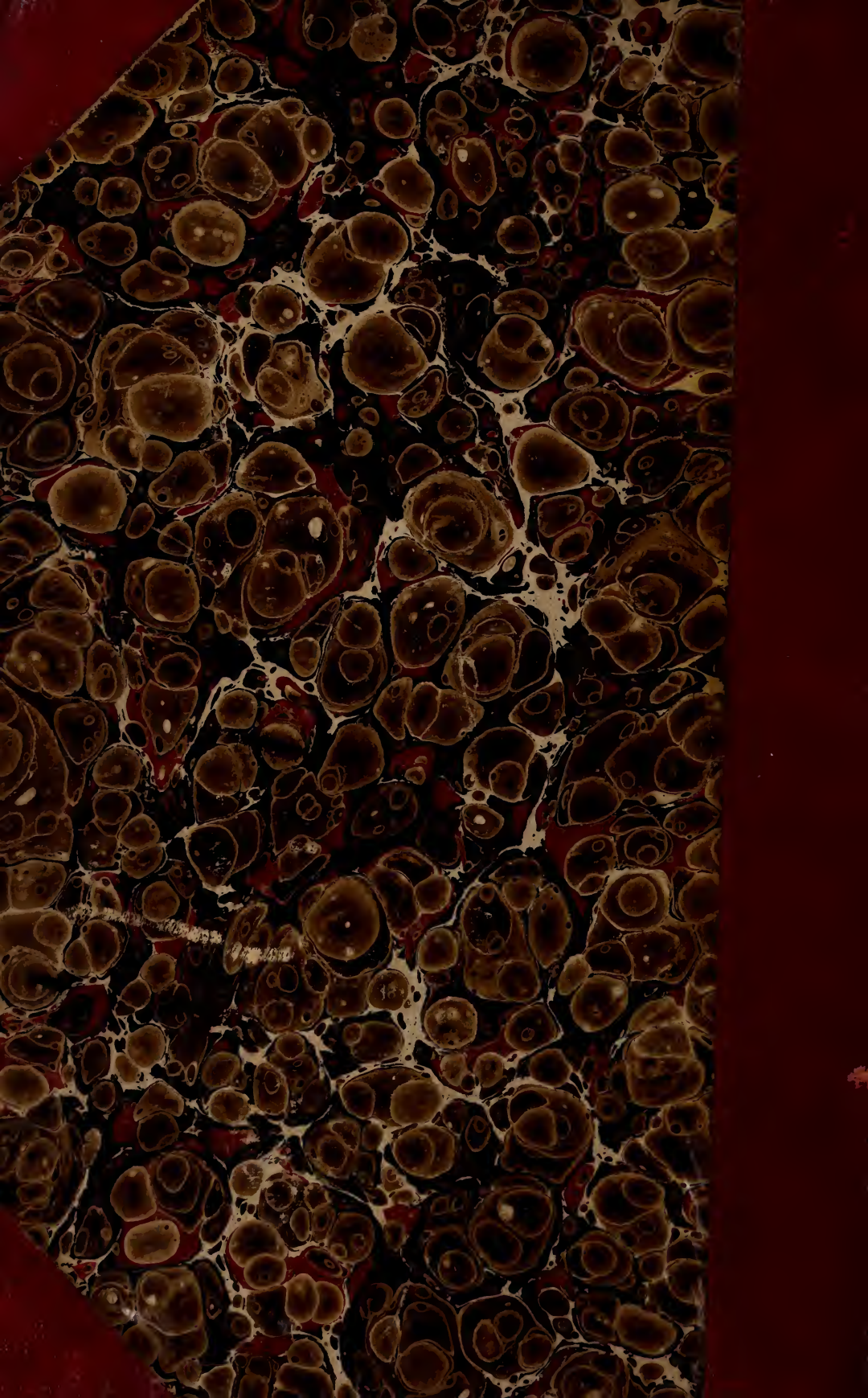
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